DOCUMENT RESUME

ED 211 220 PS 012 595

AUTHOR	Stallings, Jane; And Others
TITLE	Family Day Care in the United States: Observation Component. Final Report of the National Day Care Home Study. Volume 3.
INSTITUTION	Abt Associates, Inc., Cambridge, Mass.; Center for Systems and Program Development, Inc., Washington, D.C.; SRI International, Menlo Park, Calif.
SPONS AGENCY	Administration for Children, Youth, and Families (DHHS), Washington, D.C.
REPORT NO	DHHS-OHDS-80-30284
PUB DATE	Jun 80
CONTRACT	HEW-105-77-1052
NOTE	508p.; For related documents, see PS 012 593-599.
EDRS PRICE	MF02/PC21 Plus Postage.
DESCRIPTORS	*Behavior Patterns; *Child Caregivers; Early Childhood Education; *Family Day Care; Individual Characteristics; Longitudinal Studies; Observation; *Research Design; *Research Methodology; Surveys; Tables (Data); *Young Children
IDENTIFIERS	*National Day Care Home Study

ABSTRACT

This volume, third in a series of seven reporting the design, methodology, and findings of the 4-year National Day Care Home Study (NDCHS) presents descriptive and statistical analyses of data obtained during observations of caregivers and children in family day care homes in three geographical locations (Los Angeles, San Antonio, and Philadelphia). The primary purpose of the observations was to generate information about the behavior of children and those who provide care for children in family day care settings. Following Chapter I's introductory overview of the study's background and purpose, Chapter II provides the framework for the study and a brief literature review which focuses on the role of the federal government in family day care, characteristics of day care users, the regulatory status of day care homes, and behaviors exhibited by children and caregivers in day care settings. Chapter III describes the selection of caregiver and child behavior variables, and Chapter IV discusses the instruments that were developed to study those variables. Selection of sample sites, homes, and ethnic groups is described in Chapter V. Chapter VI outlines field site development and data collection procedures. The quality of observation data is discussed in detail in Chapter VII. Chapter VIII presents analyses, conclusions and results, and Chapter IX is a summary providing a discussion of study questions and recommendations. (Author/MP)

****

* Reproductions supplied by EDRS are the best that can be made *

* from the original document. *

****

ED211220

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Family Day Care in the United States:

Observation Component

PS 012595

NATIONAL DAY CARE HOME STUDY

OBSERVATION COMPONENT

June 1980

Final Report, Volume III

By: Jane Stallings and Andrew Porter

With: Georgia Gillis
Elaine French, Consultant

Contributors: Mary Wilcox
Jean Carew, Consultant
Nicholas Stayrook
Kathleen Pope
Arlene Krasnow

Prepared for:

Day Care Division
Administration for Children, Youth and Families
Department of Health and Human Services
Washington, D.C. 20202

Patricia Divine Hawkins, Project Director

Contract HEW-105-77-1052

DHHS Publication No. (OHDS) 80-30284
Issued October 1980

PS 012595

NATIONAL DAY CARE HOME STUDY

Sponsoring Agency

Day Care Division
Administration for Children,
Youth and Families
Office of Human Development Services
Department of Health and Human Services
P.O. Box 1182
Washington, D.C. 10013

Patricia Hawkins
Project Director

(202) 755-8774

Observation Contractor

SRI International
333 Ravenswood Avenue
Menlo Park, California 94025

Jane Stallings
Project Director

(415) 326-6200, x3564

Research Contractor

Abt Associates, Inc.
55 Wheeler Street
Cambridge, Massachusetts 02138

Steven Fosburg
Project Director

(617) 492-7100

Research Subcontractor

Center for Systems and
Program Development
1522 K Street, N.W., Room 620
Washington, D.C. 20005

Jacqueline Davison
Project Director

(202) 833-1891

ACKNOWLEDGMENTS

This final report of the National Day Care Home Study (NDCHS) observation component reflects the dedication, commitment, and effort of many people both within and outside SRI International.

This research was conducted in the Education Research Center (Richard A. Marciano, Director) of SRI's Health and Social Systems Group, which is headed by Ernest J. Moore, Vice President. Dr. Jane Stallings, Manager of the Classroom Process and Teacher Training Group, was Project Leader. Dr. Mary Wilcox served as Assistant Project Director.

We gratefully acknowledge the support and guidance of Richard Marciano, the project supervisor. He gave generously of his time, providing leadership in the management of the project and providing excellent review for deliverables. His standards for quality of work have been a challenge to all of us.

The cooperation and support of the staff of the Administration for Children, Youth and Families deserves special recognition. We deeply appreciate the encouragement and guidance of Patricia Hawkins, Project Director. She provided considerable support to our staff. She asked probing questions and contributed ideas from the inception to the completion of the project. Dr. Preston Bruce, Jr., Director of the ACYF Day Care Division, provided unfailing support and gave generously of his time and wisdom. His efforts were instrumental to the success of this project.

Special recognition is due to Steve Fosberg (Project Director of the Research Component) and his staff at Abt Associates for their assistance in helping us carry out the observation study. Because Abt personnel's responsibilities included identifying homes, they were at the locations first. They located office space and then generously shared their facilities with us. They also assisted us in locating appropriate personnel. They were helpful in working out the delicate balance of scheduling the homes and children to be observed. Likewise, Jacqueline Davison, Project Director of the Parent Component at Center for System and Program Division,

contributed tremendously to the success of the cooperative field efforts. We are grateful to her and her staff for their many contributions to the success of this study.

Dr. Jean Carew, visiting scholar, Boystown Center, Stanford University, was a consultant over the years of the study. She shared her wisdom regarding important caregiver and child behaviors. She contributed significantly to the instrument selection, development and modification and assisted in writing and critiquing reports. To Dr. Carew we are most grateful.

Special recognition is due to Dr. Andrew Porter of Michigan State University. Working along with Nick Stayrook (our highly valued SRI analyst), Dr. Porter assisted in planning and executing our analysis. He gave unstintingly of his time, warning us of pitfalls and helping us select analytic techniques best suited to our particular set of data. Dr. Porter's interest in the project has remained high since its inception and was such that he agreed to be co-author of the final report.

Our other consultants were Dr. Asa Hilliard, Dean of the School of Education, University of San Francisco; Dr. Angela Garcia, San Jose Bilingual Consortium; Dr. Luis Laosa, Educational Testing Service; Dr. Eleanor Maccoby, Department of Psychology at Stanford University; Dr. Donald Medley, University of Virginia; Dr. Ned A. Flanders, Oakland, California; Dr. Elizabeth Prescott, Pacific Oaks College; and Dr. Richard Light, Harvard University. Together with Dr. Carew and Elaine French, those consultants constituted the advisory panel for this project. We express our heartfelt appreciation for their incisive review of our analytic approaches and their valuable suggestions for making this final report more readable.

Dr. Mary Wilcox ably served as Assistant Project Director. She provided leadership in developing the instruments and supervising all the field procedures. Her care and concern for people--caregivers, observers, and staff trainers--has provided a positive and supportive environment where data could be collected with the least amount of apprehension.

We thank the SRI observation and training and data supervisory staff: Georgia Gillis, Kathy Pope, Anne Robertson, Penny Williams, Susan Alford, and Anna Maria Valenzuela. By virtue of their carefully developed training

procedures and their keen awareness of learning strategies, they provided us with reliable observers in all NDCHS projects. Daniel Broussard and Rebecca Cieniewicz deftly coordinated the field activities during Phases II and III. Robert Burnett and Lester Alderson created the complicated computer programs necessary to analyze the data. We are grateful for their creativity and patience in producing the programs required for the study. Appreciation is also extended to Lawrence Durgin, Lynn Newman, and Arlene Krasnow who diligently processed the data.

We are grateful for the diligence of Marion Arnot who coordinated the preparation and production of this complicated report. She guided the typing staff through the many revisions of text and tables. We acknowledge the contributions of Wanda Fedurek and Elree Wright, our typists who labored many hours to make the report appear as well as read well.

Finally, we offer our heartfelt thanks especially to the many caregivers, parents, children who so graciously aided us in our pursuit of a better understanding of what occurs in family day care homes.

CONTENTS

ACKNOWLEDGMENTS iii

LIST OF ILLUSTRATIONS ix

LIST OF TABLES xi

FOREWORD xvii

I INTRODUCTION 1

Background and Purpose 1
Organization of the Report 4

II FRAMEWORK FOR THE STUDY 5

Role of the Federal Government in Family Day Care . . . 5
Users of Family Day Care 7
Regulatory Status of Homes 8
Research on Family Day Care 12

III SELECTION OF VARIABLES 23

Caregiver Variables 23
Child Variables 28

IV DEVELOPMENT OF INSTRUMENTS 37

Review and Selection of Instruments 37
Phase I Developmental Process 46
Phase II Modifications 56
Phase III Refinements 76

V DESIGN AND DESCRIPTION OF THE SAMPLE 81

Types of Care and Ethnic Groups 81
Site Selection 82
Home Sample Observed 87

VI FIELD SITE DEVELOPMENT AND DATA COLLECTION 97

Coordination with Other Contractors 97
Selection of Field Personnel 99
Training 104
Quality Control 108
Administrative Tasks 109
Data Collection Procedures 110

VII THE QUALITY OF OBSERVATION DATA 117

Analysis Variables Defined on Adult Behavior 117
Analysis Variables Defined on Child Behavior 126
Summary of Phase IV Analysis Variables 128
Criterion Tape Validity Analysis 130
Interobserver Reliability 137
Summary of Interobserver Reliability Results 166
Stability of Caregiver and Child Data 167
Difficulties in the Analysis 188
Summary 189

VIII ANALYSIS AND RESULTS 193

Overall Description of Family Day Care Homes 193
Relationships Among Dependent and Independent Variables 212
Structured Situations Compared with Natural Situations 238
Homes Described by the Physical Environment and Nutrition Checklist and the Observation Summary . . . 245
Description of Outlying Homes 253

IX SUMMARY AND CONCLUSIONS 269

Descriptive Findings 269
Findings Related to Study Questions 275
Cautions or Limitations 282
Contributions of the Study 283

REFERENCES R-1

APPENDICES

A STUDY ORGANIZATION CHART AND LIST OF CONSULTANTS . . A-1

B PHASE III INSTRUMENTS B-1

C MEANS OF INDEPENDENT VARIABLES FOR EACH OF SEVERAL SAMPLES OF OBSERVATION DATA C-1

D SUMMARY TABLES FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLES D-1

E SIGNIFICANT INTERACTIONS OF DESIGN VARIABLES (STATUS, SITE, AND ETHNICITY) USING CAREGIVER AND CHILD BEHAVIOR VARIABLES E-1

ILLUSTRATIONS

1 Distribution of Day Care Homes According to Average Number of Children in the Four Age Categories 91

2 Characterization of Caregivers Relative to Age, Education, and Experience 91

3 Site Staff Organization 98

4 Average Percentage of Time That Caregivers Exhibited Socioemotional Behavior 197

5 Average Percentage of Time That Caregivers Were Involved with Children in Activities 199

6 Average Percentage of Time That Caregivers Were Not Involved with Children 202

7 Average Percentage of Time That Children Exhibited Socioemotional Behavior 206

8 Average Percentage of Time That Children Were Engaged in Cognitive/Language Activities 208

9 Average Percentage of Time That Children Spent in Physical Motor Activities 211

TABLES

1 Characteristics of Studies of Family Day Care 13

2 Taxonomy of Caregiver Behaviors Used in Studies of Child Care 24

3 Taxonomy of Child Behavior Variables Reported in Studies 29

4 Summary of Phases and Objectives of the National Day Care Home Study Observation Component 38

5 Psychometric and Other Properties of Instruments 40

6 Sample ABC Frame--Phase I 48

7 Confusion Matrix for the Who Dimension 59

8 Confusion Matrix for the To Whom Dimension 60

9 Confusion Matrix for the Emotion Dimension 61

10 Confusion Matrix for the Language Dimension 61

11 Confusion Matrix for Facilitate-How 62

12 Confusion Matrix for Facilitate-What 64

13 Confusion Matrix for the Facilitate-Child Response Dimension 66

14 Confusion Matrix for the Restrict-How Dimension 66

15 Confusion Matrix for the Restrict-What Dimension 67

16 Confusion Matrix for the Restrict-Explain Dimension 68

17 Confusion Matrix for the Other Dimension 68

18 Phase II ABC Coding Frame 71

19 Phase II CC Coding Frame 74

20 Phase III ABC Coding Frame 76

21 Phase III CC Coding Frame 78

22 National Day Care Home Study Design 86

23 Number of Homes on Which Observation Data Were Available 89

24 Intercorrelations Among Independent Variables for the Total Observation Sample 93

25 Number of Observers Who Collected Data by Site, Ethnicity, and Instrument 103

26 Sample Observer Training Agenda 106

27 Phase IV Analysis Variables 119

28 Relationships Between Facilitate-How and Facilitate-What Dimensions 122

29 Factors Identified by Facilitate-What Codes 125

30 Mean Reliability Scores for Videotape Tests Related to ABC 131

31 Comparison of Agreement Between Random Pairs of Observers and Criterion Agreement 132

32 Overall Percentage of Agreement Between Observers and Criterion Videotape for Dimensions of ABC 134

33 Overall Percentage of Agreement Between Observers and Criterion Videotape for Dimensions of CC 134

34 Results of End-Of-Training Validity Test on CC and ABC (On-Site Calculations), Phase III 135

35 Results of Second Validity Test, Phase III 137

36 Indices of Interobserver Agreement on ABC in Natural Situations, Phase I 139

37 Split Plot Design To Test Correlation Between Independent and Dependent Variables 143

38 Match Between Ethnicity of Observer and Ethnicity of Caregiver (F Test) 146

39 P x R x C Mean Rates of Agreement by Dimension 147

40 P x R x C Mean Rates of Agreement Averaged Across Dimensions 150

41 T x C Mean Rates of Agreement by Dimension 151

42 Time by Ethnicity of Caregiver: Mean Rates of Agreement Averaged Across Dimensions 152

43 Design of Phase II Reliability Substudy 154

44 Adult Variables--Average Frequency of Occurrence 156

45 Field Data Interobserver Correlations, Variable by Variable 157

46 Analysis of Variance Source Table for the Reliability Substudy Design 161

47 Means of Absolute Differences Between Pairs of Observers for Each Cell in the Reliability Substudy 162

48 Ethnicity of Caregiver/Ethnicity of Observer Field Data Reliability Effects 163

49 Means of Signed Differences Between Pairs of Observers for Each Cell in the Reliability Substudy 166

50 Field Data Stability Across Two Adjacent Days 170

51 Four-Week Stability Coefficients for Caregiver Composite Variables 174

52 Spearman-Brown Estimates of the Reliability of Three Hours of Observation 178

53 Average Hour-to-Hour Stability Intercorrelations for Child Variables 181

54 Comparison of Morning and Afternoon Composition of Homes 183

55 Comparison of Morning and Afternoon Caregiver Behaviors 185

56 Comparison of Morning and Afternoon Child Behavior 187

57 Means and Standard Deviations for Caregivers' Socioemotional Behavior 195

58 Means and Standard Deviations for Caregivers' Involvement with Children 198

59 Means and Standard Deviations for Caregivers' Noninvolvement with Children 201

60 Means and Standard Deviations for Focus Child 1 and Focus Child 2 for Socioemotional Behavior 205

61 Means and Standard Deviations for Focus Child 1 and Focus Child 2 for Cognitive/Language Domain 207

62 Means and Standard Deviations for Focus Child 1 Focus Child 2 Physical Motor Activity 210

63 Interactions for Total Teaching and Language/ Information Variables 214

64 Interactions for Fine Motor Exploratory Variable by Ethnicity and Status 216

65 Percentage of Caregivers Trained in Child Care 218

66 Significant Relationships of Sites with Caregiver and Child Behaviors 221

67 Relationship of Caregiver/Home Characteristics to Caregiver and Child Behaviors 225

68 Significant Relationships of Infants in the Home to Caregiver and Child Behaviors 229

69 Significant Relationships of Number of Focus Children 1 in the Home to Caregiver and Child Behaviors 231

70 Significant Relationships of Number of Focus Children 2 in the Home to Caregiver and Child Behaviors 233

71 Significant Relationships of Age Mix to Caregiver and Child Behaviors 235

72 Significant Relationships of Average Age of Children to Caregiver and Child Behaviors 237

73 Correlation of Caregivers' Socioemotional Behaviors Observed in Natural and Structured Situations 240

74 Correlation of Natural and Structured Teaching, Participating, and Helping Caregiver Behaviors 241

75 Correlation of Natural and Structured Facilitating Activities of Caregivers 242

76 Correlation of Caregivers' Noninvolvement with Children in Structured and Natural Situations 243

77 Means and Standard Deviations for the Book Tally by Status 246

78 Means and Standard Deviations for the Book Tally by Site 247

79 Means and Standard Deviations for the Book Tally by Caregiver Ethnicity 248

80 Means and Standard Deviations for the Checklists and Observation Summary by Status 250

81 Means and Standard Deviations for the Checklists and Observation Summary by Status--San Antonio 251

82 Means and Standard Deviations for the Checklists and Observation Summary by Status--Philadelphia 252

83 Outlying Homes--Socioemotional Domain 254

84 Outlying Homes--Teach, Play/Participate, and Help 259

85 Outlying Homes--Facilitation of Activities Construct 261

86 Outlying Homes--Noninvolvement with Children Construct 265

FOREWORD

The National Day Care Home Study, sponsored by the Department of Health and Human Services, Administration for Children, Youth and Families, was a four-year study of family day care designed to further the understanding of such care, its structure and place in the community, and its costs.

Family day care--child care provided in a home other than the child's own--constitutes the largest system of out-of-home care in the United States. Of the 7.5 million U.S. families who regularly use some form of care for their children for 10 hours a week or more, 45% place their children in family day care homes. Family day care encompasses a myriad of unique arrangements between families and caregivers, ranging from informal agreements between relatives and friends to highly structured formal operations. Family day care homes operate autonomously and within family day care systems or networks of homes, which may in turn be part of larger community agencies.

Despite the widespread use of family day care, little has been known about the range of typical family day care environments, the differences and similarities between regulated and unregulated homes, cultural patterns in caring for children, or dynamics of the family day care market. Similarly, little has been known about how best to support families and caregivers in providing high-quality care in home settings. As mothers of young children increasingly enter the labor force and more children need substitute care at younger ages than ever before, a critical need exists for high-quality care that meets the diverse needs in this country at a cost that parents and taxpayers can afford. This can be accomplished in part through development and implementation of sound standards for quality care, through training and technical assistance programs, through improvement of service delivery systems, and through strong support of parents in finding and maintaining child care that meets their particular family needs. The National Day Care Home Study was initiated to provide a comprehensive base of information to further the development of these important areas and to promote increased effectiveness and efficiency in the delivery of home-based care.

The National Day Care Home Study represents the first national study of family day care and the first attempt to describe the ecology of family day care as a complex social system. It is the first major study to examine simultaneously all the principal family day care participants--the caregiver, the children in care, their parents, and the community institutions that complete the day care milieu.

All major forms of family day care are represented in the National Day Care Home Study, including the first large sample of informal, unregulated family day care homes ever studied. This in itself constitutes an important breakthrough in family day care research, because the informal care arrangements that predominate in family day care are not easily identified in scientific sampling procedures. In addition, the National Day Care Home Study is the only study of national scope to observe systematically the care of children in home environments through the use of sophisticated and carefully tested instruments. Finally, the study focused on understanding the cultural diversity in family day care among three groups that together constitute the largest users of family day care: (non-Hispanic) Whites, (non-Hispanic) Blacks, and Hispanics.

The observation component of the NDCHS, which provides the basis for this report, was designed to describe in great detail how adults and children spend their time in family day care homes. We wanted to describe the nature of care provided and to document the day-to-day activities of children with their caregivers. We wanted to understand more about the extent to which children's experiences are developmentally relevant and we wanted to document the cultural richness of family day care in behavioral terms. Finally, we wanted to develop a sound methodology for future endeavors, a methodology which would increase our ability to study the nature of children's care environments and consequently our ability to assist the day care community in the development of effective programs, policies and options.

Initiated in 1976, the National Day Care Home Study consisted of four research phases. Phase I was devoted to development of a research design capable of addressing major family day care research and policy issues. Phase II was the field implementation of the study in Los Angeles, the first of three urban sites; it was a large-scale pilot test of all design elements and field procedures. During Phase III, the study was extended to Philadelphia and San Antonio, the remaining research sites. Data from all three communities were analyzed and reported in Phase IV, the final stage of this study.

Responsibility for management of the National Day Care Home Study rested with the Administration for Children, Youth and Families, Day Care Division, in Washington, D.C. Four research organizations participated in the design and implementation of this research. During Phase I, development of the research, field management procedures, and interview instruments were carried out by Westat, Inc. of Rockville, Maryland; Abt Associates, Inc., of Cambridge, Massachusetts; and the Center for Systems and Program Development of Washington, D.C. Caregiver and child observation systems were developed under a separate contract by SRI International of Menlo Park, California. Abt Associates, Inc., and the Center for System and Program Development continued in Phases II, III, and IV as Research Contractors, and SRI International remained the Observation Contractor for the study. The organization of the National Day Care Home Study and contractor responsibilities are described in Appendix A.

In addition to the research organizations that conducted the National Day Care Home Study, a consultant panel was established during Phase I to provide important formative advice, consultation, and careful peer review throughout the study. The consultant panel, representing relevant research specialties, participated in the development of research questions and instrument design and provided thoughtful review of major study milestones. The panel included Black, White, and Hispanic consultants to ensure sensitivity to issues of concern for the populations most frequently served by family day care. In addition, minority group members of the panel formed a Minority Task Force to identify technical and policy issues of particular significance for minorities and to offer broad procedural guidelines for addressing these issues. (Appendix A includes a list of those who served on the consultant panel and the Minority Task Force.)

The Administration for Children, Youth, and Families is proud to present this final report of the National Day Care Home Study, Observation Component. The research was carefully conceived and executed and, we believe, substantially expands the base of knowledge about family day care. We are hopeful that this information will also be useful to others in the day care field as we strive together to promote the well being of our nation's children.

Patricia Divine Hawkins

Patricia Divine Hawkins
Project Director
National Day Care Home Study
Administration for Children, YOuth and Families
Day Care Division
Washington, D.C.

I INTRODUCTION

Background and Purpose

Family day care homes offer the most widely used form of child care outside the child's own home. The U.S. Senate Finance Committee (1977) reported that day care homes served 793,000 children, whereas centers served only 198,000. If unregulated day care homes were included, the number of children served would be perhaps as high as 4 million. These figures indicate that a large number of children are being affected by family day care experiences, and the trend to use this type of care is increasing. According to the U.S. Senate Committee on Finance (1977), the number of children cared for in regulated family day care homes increased by 126% from 1970 to 1975. This estimate does not include children receiving unregulated care.

The inability to state with certainty how many children are served by family day care reflects a general lack of descriptive information about this form of care. Family day care is an arrangement whereby a child is cared for in the home of a person other than his or her parents. Because such arrangements tend to be informal, they have eluded systematic study.

The primary purpose of the observation component of the National Day Care Home Study (NDCHS) was to describe the behavior of children and those who provide care for children in family day care homes. These descriptions cover a wide range of family day care situations. Specifically, the study focused on homes that are unregulated and homes that are regulated by public agencies. The regulated homes may be licensed, registered, or sponsored. Within the groups of regulated and unregulated homes are differing adult/child ratios, age mixes of children, and levels of caregiver experience and education.

Family day care was examined in three geographical locations (Los Angeles, San Antonio, and Philadelphia). The sample of caregivers comprised three major ethnic groups (White non-Hispanic, Black non-Hispanic, and Hispanic). Descriptive data from the study are expected to be useful to (1) policymakers in making decisions that affect child care, (2) researchers in guiding other child care studies, (3) caregivers interested in becoming better informed about their profession, and (4) parents in choosing a form of care for their children.

When parents choose between center care and family day care, they most likely weigh several factors. Some advantages family day care may have over center care are:

- Family day care is more likely to be personalized, because only small groups of children are usually present.
- Family day care is frequently in the family's neighborhood and is more convenient for parents.
- Care provided in the home community is likely to maintain continuity in cultural values and peer group contacts.
- Family day care can accommodate an age mix of children and is less likely to split up siblings.
- Family day care can accommodate children with minor illness and some physical handicaps.
- Arrangements can often be flexible to adapt to parents' work schedules.
- Family day care is home-like.
- Family day care is often more moderately priced than center care.

Family day care may also have some disadvantages:

- Family day care may be more adult centered than child centered.
- Such care may not provide appropriate developmental experiences for children of many different ages.
- Arrangements may break down if caregivers or members of their families become ill.
- Family day care can result in role conflict between the day care mother and the child's mother.
- Family day care is less stable than center care.
- It is difficult to monitor family day care and thus to assure quality control and determine the need for additional services for children in care.

Both sets of ideas about family day care may be valid; at least they give the reader an indication of the possible strengths and weaknesses of family day care. The observation component of the NDCHS is expected to help clarify the extent to which these claims are accurate descriptions of family day care.

The NDCHS, of which SRI's observation study is part, is the first major study to examine simultaneously all the principal family day care participants—the caregiver, the children in care, their parents, and the community institutions that complete the day care picture.

All major forms of family day care are represented in the NDCHS, including the first large sample of informal, unregulated family day care homes ever studied. In addition, the NDCHS represents the only study of national scope to observe systematically the care of children in home environments using comprehensive and carefully tested instruments.

The primary questions and issues that motivated the observation study were:

(1) Do differences exist in caregiver and child behaviors among unregulated, regulated, or sponsored homes? The issue is whether regulations or regulatory structures affect the kinds of experiences children have.

(2) How do the number and age mix of children in the homes relate to the kinds of experiences children have in day care homes? The issue is whether caregiver and child behaviors fluctuate in accordance with these characteristics.

(3) Are differences in caregiver education related to the kinds of experiences children have in family day care homes? The issue is whether training or educational intervention could improve the quality of care children receive.

(4) Does the number of years caregivers have been caring for children (their own or others) make a difference in the kinds of experiences children have in family day care? The issue is whether some minimal level of experience should be required before caregivers are licensed or registered. (Some believe that a provisional training licensing should be granted to inexperienced caregivers during the time they gain experience and perhaps receive training from a sponsor or network.)

(5) Do broad cultural patterns exist that distinguish caregiver and child behaviors among major ethnic groups that use family day care? The issue is whether such patterns are really cultural differences or rather are the result of confounding ethnicity with other caregiver characteristics such as education. This information could be useful in developing training and delivery systems and could help policymakers be more responsive to the major constituencies of day care.

(6) Do regional differences exist in caregiver and child behaviors? The issue is whether regulations, training programs, and program development should be similar in all parts of the country. For

example, in geographical areas with warm climates children can play out-of-doors year-round whereas they cannot in cold climates.

Organization of the Report

Chapter II of this report provides the framework for the study and includes a brief review of relevant literature.

Chapter III describes the selection of caregiver and child behavioral variables, and Chapter IV discusses the instruments that were developed to study those variables. Selection of sample sites, homes, and ethnic groups is described in Chapter V, and Chapter VI outlines field site development and data collection procedures. The quality of observation data is discussed in detail in Chapter VII. Chapter VIII presents analyses, conclusions, and results, and Chapter IX is a summary providing a discussion of study questions and recommendations.

II FRAMEWORK FOR THE STUDY

The purpose of the observation component of the NDCHS was to provide the Office of the Administration for Children, Youth and Families with detailed descriptions of family day care homes. These descriptions may assist in guiding federal policy regarding family day care. Therefore, the data must provide information to help answer such questions about family day care regulations as whether unregulated, regulated, and sponsored homes differ. A particular need was to document regulatable elements of homes; for example, the ratio of children to caregiver, the age mix of children, the age and experience of caregiver, and the health and safety factors in the home.

To describe and compare caregiver and child behaviors within various environments is the central task of this report. To guide selection of the study variables and ultimately the instruments, policymakers' needs and the state of the art of home day care were considered. The state of the art was determined by conducting a literature review of studies on child care in family day care homes or own homes. Thus, this chapter focuses on the role and interest of the federal government in family day care, on characteristics of day care users, and on the regulatory status of homes, and a review is presented of research on caregiver and child behaviors in day care settings.

Role of the Federal Government in Family Day Care

The most visible federal role in family day care is the provison of subsidies to day care homes. Title XX and Title IVA, both part of the Social Security Act, are the two main sources of funds for this care.

Title XX funding is the more widely known of the two sources because homes receiving this form of subsidy must conform to the Federal Interagency Day Care Regulations (FIDCR) and therefore must be regulated homes. The federal day care regulations require that homes conform to certain specifications on adult/child ratios, physical space availability, and program components. Because the majority of day care homes are not licensed, Title XX supports only a limited portion of the total supply of family day care. The Public Services Administration (1976) reported that 49% of Title XX funding for child care went to centers and 24% went to family day care homes.

A larger amount of federal subsidies for family day care may be channeled through Title IVA. The so-called income disregard provision allows mothers who receive aid through Aid to Families with Dependent Children (AFDC) to be reimbursed for child care expenses incurred while they are working. This provision functions essentially as a voucher system. Because most poor parents tend to use unlicensed care when given a choice (Hill, 1977), these Title IVA funds probably are expended primarily for unlicensed family day care. In any event, the FIDCR have not been applied to this form of federally subsidized care.

Federal policies may have a significant impact on the large numbers of families depending on family day care. Policy toward AFDC and Title IVA is particularly important. Federal legislation encouraging increased employment of AFDC mothers may tend to increase the demand for family day care, and the supply of informal (unlicensed) care will probably increase. By limiting expenditures of Title XX funds to licensed care that complies with federal day care regulations, the current federal position essentially excludes many eligible parents from receiving Title XX subsidies because those parents have chosen to use unlicensed care. Relaxing Title XX requirements or the stringency of the regulations or both may increase the number of subsidy recipients.

The second most visible federal role vis-a-vis family day care is its regulatory function. Although this role is related to federal funding policy, it can be considered separately.

The federal day care regulations stem from federal concern with ensuring some form of quality control in the expenditure of public funds. The assumption is that homes complying with the regulations will offer children a more developmentally sound environment and set of experiences. Although children in regulated homes may receive some relative advantage, the existence and nature of such an advantage have yet to be determined. Ricciuti (1976) stated:

> Generally speaking, day care requirements need to be realistic in the sense of being reasonably attainable by most concerned day care providers, rather than rigid and unattainable, especially if meeting a particular requirement does not by itself ensure high quality care or prevent possible adverse effects.

Enforcement of unrealistic requirements may, in the case of family day care, have undesirable side effects, such as reducing the number of caregivers who are willing to take children or encouraging more caregivers to provide unregulated care. The nature and appropriateness of the FIDCR have been the subjects of major research efforts in the past few years, and new regulations have recently been proposed. Continuing efforts to improve federal regulations is important, and data from the NDCHS should be useful in this effort.*

Because federal funds go to homes serving Title IVA recipients that need not comply with FIDCR and that may be unlicensed, federal concern with quality in family day care cannot be limited to concern with the regulations per se. Therefore, it is necessary to determine what experiences and environments children encounter in a wide range of family day care homes. Possibly many unregulated homes provide care of equal or higher quality than regulated homes. Emlen (1977) and Hall and Weiner (1977) found that unlicensed providers essentially regulated themselves; in those researchers' samples, child/ adult ratios were lower in unlicensed homes than in licensed homes. This is an area where the observation component of the NDCHS can provide important information by documenting the behavior of children and caregivers in a wide range of licensed day care homes in several geographical locations.

Users of Family Day Care

The question of who uses family day care is a matter of some debate, and descriptive data from the NDCHS will be important in understanding this issue. Schultze et al. (1972) reported that Black families tend to prefer center-based care over family day care. A more recent review of use studies (Hill, 1977) stated that use patterns differ little among ethnic groups. It is now believed that three major ethnic groups use family day care--White non-Hispanic, Black non-Hispanic, and Hispanics--and they are represented in this study.

---

* Data from the study were used in revising federal regulations during the latter part of 1979.

The income level of users is also subject to question. Schultze et al. (1972) reported that users are primarily low income groups, but Hill (1977) reported that use of and preference for family day care is not related to family income. However, Hill and Weiner (1977) found that the use of formal (that is, regulated) care is positively related to the earnings of the mothers. Most informal, unregulated care consists of family day care homes (virtually no unregulated centers exist), which suggests that mothers earning lower incomes tend to use family day care.

Moreover, parents' choice of mode of care is economically rational. They use informal or unregulated and nonmarket (free) care because it is less expensive than formal market modes (Hill, 1977). This also suggests that poor families would be more inclined to use cheaper family day care than to use more expensive center care. However, some observers believe that higher income groups prefer family day care, especially for infants, because it is more home-like, and that lower income families seek the purported educational benefits of center care. It may be that a mix of socioeconomic groups use family day care and that federal policy would affect no one group more than another. Parent data from the NDCHS may help to clarify this issue.

Regulatory Status of Homes

One of the primary issues that guided and motivated the observation study was whether differences in caregiver and child behaviors are related to differences in the regulatory status of family day care homes. Homes can be categorized as (1) unregulated, (2) regulated (licensed or registered), and (3) sponsored. These categories are described below.

Unregulated Homes

Unregulated homes are those that are not licensed or registered by a public agency. Unregulated care, although illegal in many cases, is by far the most prevalent form of family day care. Because unregulated care is not formally acknowledged or identified, it is often established on an informal individual basis between the child's mother and the provider. Many caregivers are not licensed or registered purely because they are ignorant of the necessity. Others choose to avoid the bureaucratic problems often associated with licensing or registering. A survey by Westinghouse/Westat (1971) estimated that unlicensed care constituted 90% of all day care arrangements. The data describing these informal arrangements are few because unlicensed providers are difficult to identify and contact.

Hall and Weiner (1977), reporting on an intensive study of the child care markets in Denver and Seattle, presented a large amount of information on both licensed and unlicensed care. Regulated and unregulated providers perceive their role similarly. Ninety-one percent of the unlicensed family day care home providers in Seattle stated that they were providing custodial care, and 9% said they were providing educational-developmental care. Seventy-eight percent of the licensed providers in Seattle said they were providing custodial care, and 20% said they provided educational-developmental care. The figures for licensed care in Denver are identical, but 81% of the unlicensed caregivers in Denver said that they provided custodial care and 17% said they provided educational-developmental care. Like Emlen (1977), Hall and Weiner found that child/adult ratios were lower in unlicensed than in licensed homes.

Regulated Homes: Licensed or Registered

In the case of licensed care, the caregiver has been licensed by a state, county, or local government agency such as a state department of human resources, a county board of health, or a local child care coordinating council. Nationally, licensing procedures and criteria vary considerably, but most licensing standards concern group composition and basic health and safety measures. Local officials visit the homes to review the health and safety of the environment.

In some areas, registration of homes is being tried as an alternative to licensing. Caregivers must notify officials that they are providing child care, but it is not mandatory that homes be visited and evaluated. This less expensive form of monitoring may enable caregivers to benefit from official referrals yet save the public the cost of enforcing quality standards. Some opponents of registration believe that the quality of care in homes will decline without monitoring.

A study in Michigan (Bureau of Regulatory Services, 1977) revealed that registration increased the number of homes that were reached compared with the number that had been reached by licensing. It was believed that registration could increase the number of regulated homes by 62% without increasing public cost. Caregivers found registration a more palatable method than licensing because they had to conform to fewer rules.

Researchers in Texas (Lounsbury & Lounsbury, 1977) reported a similar increase in the number of homes regulated and a decrease in costs when registration rather than licensing was adopted. Registered homes were found to conform to state standards voluntarily; 92% of the homes had five or fewer violations.

A review of research on licensing (Lounsbury & Lounsbury, 1977) reported the following: (1) licensing officials were sometimes unable to agree on whether to license a marginally acceptable caregiver, which implies that standards are subjective and that many potentially substandard homes receive licenses; (2) licensing officials who were consultants to caregivers were often more lenient in applying standards; and (3) some licensed caregivers and parents who used licensed care tended to prefer licensing to registration, perhaps because of the greater amount of monitoring.

Sponsored or Network Homes

The homes that many consider to be of highest quality are those that belong to networks or sponsored organizations. These are groups of licensed caregivers whose organization provides them with referrals and training or ancillary child support services. Many of these networks operate on the assumption that, although exactly what constitutes quality in family day care is not known, provision of training and technical assistance to caregivers undoubtedly will improve the quality of care. Some networks have been started by researchers, some by community agencies or colleges, and some by the providers themselves.

Research projects in family day care by Sale (1972), Emlen (1977), and Colbert and Enos (1978) have indicated that family day caregivers welcome and benefit from the training and exchange of information with their peers that sponsorship and organization afford. The caregivers in Sale's project, for example, developed an organization that continued to operate after the research ended. Sale reported that networks of caregivers seem to be most effective when the caregivers themselves help determine the purpose of the group, generate the goals of their training sessions, and identify progress toward those goals. Outside facilitators, however, are essential in helping caregivers formulate goals and in providing training. Establishing sponsored networks of homes tended to increase the number and type of services provided and to enhance the caregiver's perception of herself and her role. A by-product of the development of networks of homes is that unlicensed caregivers often decide to seek a license, because the network makes them aware of the legal necessity of being licensed.

Networks have been established independently in many states. As indicated above, one of their major functions is provision of training and technical assistance, often through local community colleges. This offers a promising opportunity for federal policymakers to influence the quality of family day care. Funds for training and technical assistance might be provided to already existing networks or to demonstration programs that encourage formation of family day care networks.

No previous research has compared caregiver and child behaviors in unregulated, regulated, and sponsored homes. Most studies have examined only licensed homes because they are more accessible than unlicensed homes. Little evidence has been accumulated, therefore, to support the contention that the regulatory or sponsorship status of the day care home represents important differences in child or adult behaviors occurring in that home. The present study sheds some light on this issue.

Research on Family Day Care

The effect of the regulatory status of homes on caregiver and child behaviors was only one of the research issues guiding the current study. Other issues concerned the effects of number and age mix of children, caregiver training or education, caregiver experience, cultural and ethnic differences, and regional differences. This section is a review of previous research bearing on these issues.

Although a fairly substantial amount of research has been conducted on family day care, most studies have been limited in sample size, number of variables, or research design. Most have focused on a global comparison of different day care types--that is, centers, day care homes, or children's own homes. No studies are as comprehensive as the NDCHS; for example, no previous studies have examined a nationally representative sample of caregivers, varying in regulatory status, in number and age mix of children, or in training, education, and experience of the caregiver.

Many researchers, however, have reported or described the nature of the homes included in their studies in terms of these central variables. Table 1 summarizes the characteristics of homes studied in previous research and shows how homes in the NDCHS compare. Past studies yield some important information relevant to the current study. They are discussed in terms of the information they offer on caregiver behavior and on child behavior.

Caregiver Behavior

Despite the generally recognized importance of caregiver characteristics, relatively few studies have specifically focused on caregiver behaviors and attitudes. Most studies have addressed effects of family day care on children, and description of caregiver variables has often been secondary.

Table 1

CHARACTERISTICS OF STUDIES OF FAMILY DAY CARE

Researchers	Average Number of Children Present	Age of Children (years)				Socioeconomic Status (SES) of Day Care Home	Ethnicity of Caregiver			Caregiver's Average Experience in Child Care	Average Age of Caregivers	Average Education of Caregiver	Marital Status of Caregiver	Status of Day Care Home (N = __; if Known)		
		0-2	2-3	3-5	5 and Over		Black	White	Hispanic					Sponsored*	Regulated	Unregulated
Colbert & Enos (1978)	$\bar{X} = 4$	N = 29		N = 28	N = 11	Range from low SES to medium SES	N = 13	N = 5	N = 0	11% 1-3 yr 39% 1 yr 33% over 5 yr	56% over 35 44% 21-35	56% some college 0% college degree	78% married 17% widows 6% single	100% during study	© 74% of sample	© 26% of sample
Golden (1977)	≤6; all homes used New York City modification of FIDCR	N = 400		NR	NR	Largely LSES	NR	NR	NR	NR	NR	NR	NR	© N = 100 (20 networks)	None	None
Wattenberg (1977)	≤5; FIDCR used	NR	NR	NR	NR	Probably range from LSES to MSES	NR	NR	NR	NR	NR	NR	NR	100% during study	N = 320 Some but number undeterminable	
Cochran (1977)	1 or 2	N = 26 12-18 mo old	NR	NR	NR	Range from LSES to MSES	NR Probably all White	NR	NR	NR	NR	NR	NR	N = 26? (Non-U.S. sample)		
Sale (1972) Prescott (1973)	≤5; used FIDCR	24%	23%	53%	22%	77% working class or lower middle class	N = 12	N = 5	N = 5	NR	7/22 in 30s 5/22 in 40s 5/22 in 50s Range, 20 69	NR	19 of 22 married	None	N = 12	N = 10
Saunders & Keister (1972)	≤5; used FIDCR	N = 12 2-23 mo old	NR	NR	NR	Probably largely LSES	NR Probably some Black, some White	NR	NR					None	Some	Some
Emlen (1977) Collins, Emlen, & Watson (1969)	3-4	NR	NR	NR	NR	Average income, $3,000-$5,000	NR	NR	NR	5 yr	29	18 - high school degree 9 - some college	NR	100% during study	Some	Probably some
Rodriguez & Hignett (1976)	NR	NR	NR	NR	NR	Probably some low SES and medium SES	NR	NR	NR							
Reinhart & Evans (1978)	54% 1-3 37% 4-6 8% 7+	56%			None	Median income, $9,000	NR	NR	NR	NR	NR	33% - some college 19% < 12th grade	NR	NR	N = 263	0
Howes & Rubenstein (1978)	$\bar{X} = 3.7$	Range = 16 mo-3 yr X = 25 mo.		None	None	NR	NR	NR	NR	3.9 yr	NR	2 yr	NR	0	N = 22	0
Peters (1972)	Average, 3-6	N = 241		N = 202	N = 106	NR	NR	NR	NR	NR	NR	< 15% had child care study in high school or college	NR	0	N = 1614	0
Hall & Weiner (1977)	Licensed, 4.9 Unlicensed, 3.5	Unlicensed, 3% Licensed, 19%	Unlicensed, 49% Licensed, 55%		Unlicensed, 27% Licensed, 26%	NR	Unlicensed, 47% Licensed, 20%	Unlicensed, 37% Licensed, 72%	Unlicensed, 13.5% Licensed, 6.7%	Unlicensed, 3.1 yr Licensed, 5.4 yr	Unlicensed, 31.7 Licensed, 41	Unlicensed, 10.9 yr Licensed, 11.8 yr	NR	NR	Denver, 5% Seattle, 19%	Denver, 62% Seattle, 37%
French (1980)	$\bar{X} = 4.3$	5	15	3	3	Low-middle SES	2	21	2	8.4 yr	36-40	High school graduate	18 married 8 single	17	N = 26	0
SRI-NDCHS	$\bar{X} = 3.74$	N = 247 age 12-35 mo		N = 158 age 36-59 mo			100	126	77	7 yr	43	11.3 average	?	90	N = 113	100

NR = Not reported.

*Sponsored may include licensed and unlicensed.

Prescott (1973) compared 12 family day care homes with 7 closed- and 7 open-structure centers and 14 half-day nursery school/own home combinations. The family day care homes were part of the Sale sponsorship project.* Individual children in family day care and own-home care were observed to receive more adult facilitation or "instigation" (i.e., input that suggests or elaborates) than children in either form of center care. Individual children in closed centers received more "pressure" from adults; next highest was family day care, followed by open centers, and finally nursery school/homes.

More adult intervention to end activities occurred in center care than in family day care or nursery school-home care. On the average, children in family day care received the greatest amount of adult input of both types (instigation and pressure). Adults thus seemed to be more accessible to children in home-based care than in centers. Prescott concluded that:

> ... family day care and nursery school-home care present markedly similar profiles. Adults in both home-based settings were more available to children than in group [center] care; opportunities for the child to make choices and to control the environment were markedly higher than in group care. Supports for self-esteem appeared high.
>
> Opportunities for cognitive engagement did not appear to be lower in family day care than in open-structure group care, although adult input toward this goal may be somewhat less. Nursery school-home care appeared to provide for maximum individualization and for some what more cognitive input than family day care. (p. 7)

Cochran (1977) studied children aged 12 to 18 months in Sweden; 60 were in day care centers, 34 were in their own homes, and 26 were in family day care homes. The groups of children were matched on a number of demographic variables and on positive attitude of parents toward day care. Day care homes in Sweden cannot be considered comparable to those in this country because a strong public support system for day care exists there. Nonetheless, the results are of interest. Significant differences in the number of overall caregiver-child interactions emerged in this study; in 50 minutes of observation, 50 interactions between caregiver and children occurred in own homes, 49 in family day care homes, and 32 in centers. Caregivers in the two home settings engaged in significantly more teaching, supervising, and "do's" and "don't's" than did center caregivers. Family day caregivers tended to be slightly higher than own-home caregivers in all caregiver behaviors except the "don't." Cochran (1977) concludes that there were "more instances where negative sanctions were applied in the homes than in the centers, and these instances often involved the exploring by the home or day home child of no-no's not available to children in the centers" (p. 2).

---

* Sale (1972) describes 22 family day care homes included in the project, but Prescott (1973) does not identify which of these 22 were included in her sample of 12. Thus, these homes cannot be described.

Howes and Rubenstein (1978) observed 40 19-month-old toddlers, half in licensed centers and half in licensed family day care and all in the same geographical area. Four factors of caregiver behavior were assessed: skillful caretaking, restrictive and negative behavior, negative responsiveness to toddler demands, and positive responsiveness to sharing and toddler vocalization. Only restrictive and negative behavior were significantly different between the groups. Family day caregivers were higher than center caregivers on reprimands, negative responses to positive bids, and ignoring of positive bids. The authors point out, however, that the percentage of the total observational period spent in such negative behaviors was minimal despite significant group differences.

Rodriguez and Hignett (1976) studied caregiver behaviors in sponsored homes. By means of interviews and observations of caregiver behavior, they determined that the following variables were indicative of high-quality care according to the clinical expertise of the interviewer: motivation; ability to see individual differences in children; attitude toward maternal separation, discipline, weaning, toilet training, and children of different racial and ethnic backgrounds; and ability to cooperate with agency administrators and parents.

In the Pennsylvania Study (Peters, 1972), ratings and frequency counts of observed caregiver behavior in approximately 160 licensed homes were reported. Verbal and physical contact between caregivers and children were rated, and more homes were rated high on physical contact than on verbal contact. Fifty-one percent of the caregivers were rated as spending almost all their time with children, and 16% were rated as spending more time with things than with children. Caregivers were rated for the number of "do's" and "don't's" they used. In 63% of the homes, the number of rules imposed on the use of material was rated as minimal. More rules were imposed on behaviors: 25% of the homes were rated as high in imposition of rules, 29% as moderate, and 45% as minimal. In 37% of the homes, caregivers were rated as doing little to encourage exploration and curiosity. In fact, preplanned educational or play activities were the exception, not the rule, and television watching was the most frequently observed activity.

One additional study in progress warrants mention here. Researchers in the Stanford-Boystown Day Care Study collected longitudinal data on about 200 children, 12 to 24 months old. Data included both pre- and post-outcome measures and observational measures on family and center day care and home-reared groups. The following caregiver behaviors were observed: attempts to comfort; comforts; redirects; no response; negative response; hostile; proximity to child; caregiving; management; play/instruction; approaches; negative, neutral, and positive physical and verbal behavior; and smiles. One central focus of the study is to identify relationships between caregiver or child behaviors and pre/post changes in developmental variables. Day care homes in the sample include sponsored, licensed, and unlicensed homes, and caregivers come from a range of ethnic and cultural backgrounds. It will be interesting to compare findings from this study with findings from the NDCHS since the independent variables are similar in the studies.

In summary, a few trends in observed and reported behaviors of caregivers can be tentatively identified. First, family caregivers appear to be more restrictive and directive in their behavior than most center caregivers. Cochran reported that in this respect they resembled children's mothers, whereas Prescott's study showed that own-home care was lower in "pressure" behavior. (Howes and Rubenstein reported others' data that showed children's mothers were much higher in restrictive behaviors than either type of caregiver.)

Second, family caregivers seem to be highly involved with the children in their care. Several studies reported that interactions between caregiver and child occurred more frequently in family care than in center day care, and Peters found that 51% of the caregivers in his sample spent almost all their time with children.

Third, caregivers do not appear to devote much of their time with the children to educational or developmental activities. (This conclusion is also supported by studies described in Tucker, n.d.) Hall and Weiner (1977) reported that family caregivers described themselves as offering primarily custodial care. Carew (1978) found that more of the language mastery experiences at the child's own home came from educational television and that language mastery experiences in the day care center were three times more likely to involve the caregiver. If children appear to spend a good deal of time at family day care homes watching television (Peters, 1972), it may be that in this regard family day care does resemble own-home care.

Although there is no conclusive evidence that family day care providers resemble children's own mothers more closely than they resemble center caregivers, studies of mothers' behavior have uncovered important dimensions that should be included in studies of caregiver behavior. For example, in home observational studies on 1- and 2-year-olds, Clarke-Stewart (1973) reported that the mother's role in providing cognitive and language stimulation critically affected the child's cognitive and language development. Similarly, her social responsiveness to the child, the social guidance she exerted, and her warmth and affection were positively related to the child's social and emotional development.

Two studies by Carew et al. (1976b, 1977), provide similar results. In one, Carew observed the experiences of individual children, 12 to 34 months old, in their own homes. In the other, Carew et al., observed the experiences of individual children, aged 18 to 34 months, in the day care centers they attended. In both studies, the behavior of caregivers (whether mothers or teachers) in providing intellectual and language stimulation and guiding the child's "intellectually valuable" activities was found to be highly correlated with the children's Stanford Binet test scores at age three. In fact, activities in which caregivers played this stimulating/structuring/participating role with the child were much more strongly related to the child's later test scores than were activities in which the child provided his or her own intellectual stimulation (in independent play that did not involve the caregiver).

Child Behavior

The New York Infant Day Care Study (NYIDCS) (Golden et al., 1978) compared 400 children aged 2 to 36 months in 31 publicly and privately funded nonprofit, licensed family and center care programs and in own-home care. Five comprehensive observational measures were used and three levels of analyses were to be undertaken.

These researchers found that center care children were at an advantage, at least on measures of intellectual development. When assessed at 18 months of age, the center care and family care groups had significantly higher scores on the Bayley Scales of Infant Development than did the home-reared group. Stanford Binet IQ was significantly higher for 36-month-old center care children than for a family day care comparison group of children. Cognitive differences were seen only in the results of standardized tests and not in naturalistic observations. It may be that center care prepares children better academically (i.e., test-taking readiness) than does family day care, but real cognitive differences may not exist.

The NYIDCS sample was predominantly lower income (less than 10% could be considered middle income). Carew (1978) reported a similar conclusion for her study of middle income, home-reared children compared with center care children. She stated:

> It seems that for these middle class children, the middle class day care center may be an intellectually more stimulating environment than the middle class home, at least in the sense of providing precisely the kind of experiences that promote performance on traditional competence tests. (p. 128)

Children in center care had other advantages, according to Golden et al. Nutrition, safety, and health care were significantly better in centers. Variation among children within the family day care group (e.g., between licensed and unlicensed) was not examined.

Another study showed that center care children outperformed family day care children on motor and conceptual developmental variables (Vroegh, 1976). Twelve- to 36-month-old children from a predominantly lower income background were rated every 6 months for 18 months. Home day care children were rated higher in being compliant and likeable, but no differences were seen in ratings of attention-curiosity, perseverance, and activity.

Other studies have focused primarily on measures of child behavior other than performance on standardized tests. Using an observational instrument, the Day Care Environmental Inventory, Prescott (1973) found that children in day care homes rated better than those in open- and closed-structure center care and in nursery school-home care on receiving help, tactile-sensory exploring, and total "thrusting," which includes physical activity, giving orders and options, and aggressive and playful intrusion. They were lowest of all groups in meeting expectations, receiving pain, frustration, or total rejection, tentative behaviors, and not attending to external stimuli. Children in family day care more closely resembled children in the nursery school-home care group than children in centers in 11 of 18 observed child behaviors.*

Cochran (1977) assessed 12-month-old toddlers on the Griffiths Mental Development Scale (GMDS) in a semistructured situation designed to measure attachment to their mothers and with observational measures. Children in the home-reared group and in day care homes did better than center-based children only on the hearing-and-speech subscale of the GMDS, and there were no differences on the separation/attachment measure.

Observational measures of child interactions with caregivers and of experiences showed three activities that significantly distinguished the three settings. In both home settings, children engaged significantly more often in exploring and being carried by an adult, whereas center-based children were more often observed in play. Of caregiver-child interactions, children in both home settings were more likely than center children to be engaged in cognitive-verbal,† exploring, and play interactions with caregivers. As in the Prescott study, family day care children more closely resembled own-home care children, except that in this case own-home children engaged more actively in exploring than did day care home children.

---

* Total rejecting, actively rejecting, thrusting, meeting expectations, receiving help, receiving frustration/rejection, not attending to external stimuli, exhibiting tentative behavior, ignoring intrusion, directing attention to children, and total integrating.

† Belsky and Steinberg (1978) reported that Feine (n.d.) also found family day care children had more sophisticated vocalization than did day care center children. Feine suggested this resulted from more adult-child interaction in the day care homes.

Lippman and Grote (1974) compared the cooperative behavior of 198 4-year-olds in day care centers, day care homes, and own homes. They found that children reared in their own homes were more likely to cooperate than those in the other two groups. This finding relates to that of Schwarz et al. (1974) that day care children tended to be more aggressive and active and less cooperative on the whole than children reared in their own homes. However, Meyer (1977) suggested that day care raises the activity level of children across a range of behaviors, and aggression is only one of them.

Howes and Rubenstein (1978) studied toddlers' behavior in centers and family day care homes and isolated five factors of child behavior: positive social skills, dependent behaviors, high positive affect and adult imitation, negative affect, and violation of adult standards. There was only one significant difference: toddlers in family day care were higher in positive social skills. They had higher frequencies of spontaneous talk and responsive talk and a higher proportion of contingent talk. The groups differed little in peer interactions.

In summary, children in family day care apparently do less well than center children on standardized tests of intellectual development. Observational measures, however, suggest that family day care children benefit from greater involvement with caregivers and are more verbal and socially skilled than center care children. Family day care children tend to resemble home-reared children on some of these variables. Because the samples in these studies were not randomly assigned to type of care, however, we cannot determine whether these effects are attributable to the type of care (i.e., centers, family day care, or own home) or to naturally occurring selection processes. That is, a different type of family may choose to use family day care, and thus children in day care homes would not be comparable to children in day care centers. Consequently, these findings must be considered tentative.

Because these studies have been concerned primarily with the comparison of children in different day care types (centers, family day care, and own homes), they have provided very little information on the effects of variation within family day care homes on the child, on the caregiver, or on ethnic and regional differences that are of interest in the current study. Moreover, not enough comparative studies of licensed and unlicensed family day care have been performed to draw any conclusions about the effects of regulatory status. The NDCHS will help clarify these issues.

The studies of caregiver and child behaviors reviewed here have yielded useful information on family day care and have helped identify dimensions for study, but they do not help in determining the components of family day care that have an effect on behaviors. The descriptions of the homes in these studies demonstrate that day care homes vary tremendously. Family day care should not be considered a homogeneous variable. An in-depth analysis of the effects of various components and characteristics of day care homes is needed. The NDCHS is a major step in that direction.

III SELECTION OF VARIABLES

This chapter presents the rationale for our selection of caregiver and child variables that were used to describe the homes in the observation component of the NDCHS. The SRI staff attempted to select the most significant variables from the literature on day care and child development. The research discussed in Chapter II suggests that most family day care is more like own-home care than it is like center care. However, some sponsored or network homes appear to be somewhat like mini day care centers. Thus, a wide range of caregiver and child variables must be included to describe family day care adequately. The variables discussed in this chapter originated from the relevant literature. In particular, we focused on studies of own-home and family day care. Previous experience in observing day care homes and preschools also guided the variable selection process. Because our responsibility was to describe family day care, the selection of behaviors for the NDCHS was limited to those that were observable.

Caregiver Variables

In the studies of child care discussed in Chapter II, many of the researchers used similar variables to describe caregiver behavior. Although different names were assigned to the same variable from one study to another, the dimensions of behavior are similar. These variables are organized into six dimensions shown in the columns of Table 2. For purposes of this study, caregiver behavior is described in terms of what the caregiver does: How does she spend her time when children are present? What is the socioemotional climate of the home? What activities does she facilitate and restrict? The variables we selected for the observation study are listed in the last row of the table. Because of the comprehensive nature of this study, the NDCHS variables are more extensive than those used by other researchers who conducted similarly focused studies. The other studies were either more general or were focused on particular dimensions of child care, but the NDCHS observation component requires a range of variables great enough to describe all caregiver and child behaviors found in family day care.

FILMED FROM
BEST COPY AVAILABLE

Table 2

TAXONOMY OF CAREGIVER BEHAVIOR USED IN STUDIES OF CHILD CARE

Author and Date of Study	Socioemotional Behavior	Teaching Behavior	Participatory Behavior	Helping Behavior	Facilitating Activities	Noninvolvement
Carew, Chan, & Halfar (1976b) Carew (1977, 1978)	Restricts	Teaches Joins in conversation	Active participatory interaction	Helps	Facilitates	Observes
Clarke-Stewart (1973)	Rejects Directs Is responsive Is effective in social behavior Has positive attitude Has positive emotional expression Restricts Provides social stimulation	Provides verbal stimulation Verbalness Referential speech Effectiveness of instrumental speech		Gives toy Caretaking Effectiveness of physical contact	Stimulation with materials Effectiveness of stimulation with materials	Looks at baby
Colbert & Enos (1978)	Social exchange Verbal control Punishes Positive and negative reinforcement Responsive	Teaching skills Demonstration of activities Asking questions Correcting	Plays	Helps		Ignores Does personal tasks
Golden (1977)	Technique control Enjoys child Encourages child Comforts Shows affection Responsive Assumes authority role	Teaches Provides cognitive environment Language interest				
Howes & Rubenstein (1978)	Restricts Reprimands Positive and negative			Provides care		Ignores bid
Peters (1972)	Imposes rules Is involved with children Negative, positive requests	Explains reasons for rules Praises, encourages Encourages exploration Has verbal contact with child				
Prescott (1973)	Emphasizes social rules Shows consideration Teacher approach Nurtures Expresses emotion Pressures Shows pleasure, delight Promotes independence Promotes individuality	Creativity Instigation Imparting information Experimentation				Inactive
Stanford/ Ambron (forthcoming)	Negative, hostile Neutral Positive Smiles, comforts Proximity, approach to child	Directs, redirects Verbal	Plays			Does not respond
Cochran (1977)	Do's, Don'ts Distraction Positive, negative reinforcement Carry, comfort	Teaches justification		Helps		Supervises Ignores
SRI NDCHS	"Do it" - directs or guides Prosocial Provides affection Comfort Expresses: Positive affect Negative affect Control-total Control-danger Control-antisocial Strict control Interacts with baby Interacts with school age child	Teaches Converses with child	Plays/ participates	Helps Physical needs	Language/ information Structured fine motor play Dramatic play Exploratory fine motor play Gross motor play Music/dance Child helps with work TV	Prepares Supervises Talks with other adults Housekeeping Recreation alone Out of room With child With baby With school age child

Socioemotional Behavior

The first dimensions presented in Table 2 evolve from the literature on day care and child development. Child care advocates, parents, and researchers generally agree about the importance of the affective climate of a home. Although persons from different cultural groups may not agree on the amount of firmness that is optimal or the amount of harsh control that is damaging, they do agree that this dimension of day care homes needs to be studied. Within this dimension, SRI has selected variables that describe a positive and nurturing environment as well as a negative, harsh, or punishing environment. Comforting a child in distress, laughing joyfully, hugging, and giving positive support all contribute to the affective environment.

The ways in which children are controlled also contribute to the climate of the home. A caregiver who is frequently harsh or punishing in her control of children creates a particular affective climate just as does the caregiver who is firm and clear in giving directions and reasons for "do's" and "don'ts." The variables in the SRI study that are included in this category are: provides affection, provides comfort, expresses positive affect, expresses negative affect, exerts harsh control, controls--"don't do it"--and directs--"do it" (which also includes guides or suggests).

Teaching Behavior

The amount of teaching that occurs in day care homes is also of prime interest to parents, child advocates, and researchers. The problem is how to identify the act of teaching. The natural teacher can use almost any event to help children learn about their world. The caregiver can teach children how to get along together, how to tie a shoe, how to make a bed, or the difference between long and short. For purposes of this study, SRI includes all events in which the caregiver tells or shows the child how to do something, points out relationships, or encourages the use of language. The overall variable, teaching, is then evaluated for its frequency.

Participating Behavior

Another way of being involved with children is through playing and participating with them in dramatic play, in games or putting a puzzle together, in swinging, or in any other activities. Social exchanges may take place during the game or play, and the goal is not to teach the child but rather to be companionable. However, these joint activities are socializing in nature, and the child undoubtedly learns skills that educators consider to be important to growth and development. This study documents the extent to which caregivers play and converse with children.

Helping Behavior

Most young children require help from caregivers to cope with their environment. Children 3 years old or younger are likely to need help with dressing, toileting, eating, or getting up or down from chairs or beds. Older children may need help in opening jars, fixing toys, or tying shoes. If physical needs are not met, children are likely to show distress.

The amount of help caregivers provide must vary considerably. Some theorists suggest that children should be encouraged to help themselves as much as possible. If adults allow a bit of tension to exist, children are more likely to figure out, for example, how to open a stuck door or how to dress themselves. In the SRI study, the amount of child self-help will be compared by age group with the amount of help the caregiver provides.

Facilitating Activities

Knowledge of the kind of activities caregivers provide to children in their care is essential to this study. The research reviewed in Chapter II leaves little doubt that the experiences children have (or the lack of them) bear on their social/emotional, cognitive/language, and physical development. The activities that caregivers provide or facilitate have been found to relate to the kind of cognitive, language, motor, and social stimulation children receive (Carew, 1977). The variables selected in this study provide information regarding materials that are presented for fine motor, gross motor, and exploratory play. Other variables indicate that provision is made for such activities as dramatic play, music, and dance. Some research suggests that children in day care homes spend considerable time watching television; thus, a variable has been selected to identify how frequently the caregiver facilitates watching TV.

One set of child activities that occur in homes but not in centers are those related to housework, such as helping to wash dishes or to make sandwiches. Housework activites are among the companionable activites that family day care advocates believe provide the valuable home-like qualities children are likely to miss in day care centers. Thus, SRI selected a variable to show when the caregiver encourages children to assist in housework.

Noninvolvement with Children

Some comparisons of family day care have indicated that home caregivers spend more time alone than caregivers in centers. The implication was that the home caregivers may therefore provide a less stimulating environment. However, a caregiver can provide children with interesting activities and continue her own activities such as making beds, doing laundry, or cleaning house. In this study, an examination was made of how much time caregivers spent in supervising or preparing for children's activites or doing housework. Other caregiver behaviors that may prevent the caregiver from interacting with children are: talking with another adult, reading a book, or watching television alone. A set of variables has been selected for the study so that all such activities where the adult is not involved with children can be documented.

Physical Environment

The physical environment that caregivers provide relates to children's physical well-being and to their growth and development. The safety, health, and activities of children are determined by the environment that the caregiver establishes. These environmental factors of homes are described in the SRI study.

Safety

The safety of children is of utmost importance to parents, policymakers, and child care advocates. One of the principal characteristics that parents are reported to look for in a day care facility is safety of their children. Thus, the physical environment of the day care home must provide safety measures appropriate to the ages of the children--for example, locks on doors and gates, covers on electric outlets, gates on stairways, and poisons locked out of reach.

Health

The food a caregiver provides may represent two-thirds of the food intake of a child. Thus, the quality of the food children receive in day care homes is important to their growth and development. Other aspects of health, such as care for sick children or protection of well children from exposure to sick children, are arrangements that are also of considerable importance to parents.

Activities/Materials and Equipment

The physical environment that caregivers provide for children determines to a great extent the type of activities that can occur. If play dough, sand, or water or other fine motor exploratory materials are available, children will have more opportunities to develop fine motor skills. If appropriate books and school-like games are available, children are more likely to develop the associated skills. Available materials need not be elaborate; for example, cardboard boxes can be used for playhouse equipment to encourage dramatic play. Pots and pans can be stacking toys or musical instruments. The point is that children need to have as many opportunities as possible to develop a wide range of skills.

Child Variables

Any study of family day care must include a description of child behaviors that occur in that environment. It is critical to learn whether children in family day care are growing and developing normally and whether they are behaving socially, cognitively, and physically in ways that would be considered appropriate to their age group.

The observation component of the NDCHS is intended to describe the wide range of child behavior likely to be found in family day care homes. Child behaviors addressed in previous studies of child care are shown in Table 3; the table is organized into areas of child development that are most often used in child development research. Findings from this study regarding how children spend their time will be compared where possible with those from other studies.

Table 3

TAXONOMY OF CHILD BEHAVIOR VARIABLES REPORTED IN STUDIES

Studies	Socioemotional Development	Cognitive/Language Development	Physical/Motor Development
Cochran (1977)	Play Social - positive Social - negative Affection Purposefulness	Cognitive/verbal Exploration Basic care	Gross motor Being carried
Golden (1977)	Social interactions Social rules Expressive Social/affective play Passive/nongoal Role/dramatic play Affect (joy, distress)	Creative/construction Exploration Vocal behavior Language teaching Objects used Concept/class/abstract Fine motor activity Interest in learning situation School oriented	Gross motor activity Self-help
Howes and Rubenstein (1978)	Dependency Initiates talk Responsive talk Proportion contingent talk Asks for something Shares Violates standards Positive affect and imitation Negative affect		
Prescott (1973)	Thrusting behavior Aimless wandering Meets expectations Receives frustration, rejection, pain Ignores intrusion Rejection Receives help Responds Tentative behavior Not attending to external stimuli	Awareness of cognitive constraints Small muscle activity	Tactile, sensory exploring Large muscle activity
Stanford (1980)	Approach Noninvolvement Solitary play Parallel play Interactive play Negative - aggression - cries Positive - smiles	Verbal Seeks help Watches	Physical behavior Eats
Carew, Chan, & Halfar (1976b) Carew (1977, 1978)		Intellectually valuable experiences, including: - expressive, artistic - perceptual, spatial, fine motor - words, symbols, information - reasoning	Fine motor, structured Fine motor, exploratory
Clarke-Stewart (1973)	Attachment Social responsiveness Looks at mother Positive emotional expression Positive involvement with mother Negative behavior Gives to mother Responsiveness to mother	Length of involvement with objects Variety of toys played with Play level Object permanence Object relations Schema development Language competence Vocalization	Motor development Activity level
SRI NDCHS	Prosocial Affection Distress Attention seeking/dependency Antisocial Controlled by caregiver Controls other young child Involved with caregiver Involved with other child Alone Monitors	Language/information Converses/caregiver Converses/child Looking at book Dramatic play Fine motor structured Fine motor exploratory	Gross motor Physical needs--self-help Physical needs/caregiver Household work

The following subsections discuss the child behavior variables selected for observation and description in the observation component of the NDCHS. They are grouped according to their relevance to children's socioemotional, cognitive, and physical motor development. Although the degree to which children in the NDCHS have progressed in these domains is not assessed, the activities and interactions that might be expected to enhance these behaviors are recorded.

Socioemotional Development

The major impacts of day care on young children are likely to lie in the socioemotional domain. Day care exposes the child to a variety of novel social situations. Initially, an unfamiliar adult makes unfamiliar rules and requests with which the child must comply. The child must learn to get along with other children and to share toys, equipment, and the caregiver's attention. Through such experiences, the child can learn about his or her own needs and the needs of others. Learning to be aware of one's own feelings and needs and the feelings and needs of others is essential to developing satisfying relationships.

Five clusters of children's social and emotional behaviors identified in the literature have been selected for examination: prosocial behavior, affection, dependency, social involvement, and antisocial behavior.

Prosocial Behavior

"Prosocial behavior" refers to positive, socially oriented actions, including cooperation, sharing, generosity, helping, and other altruistic behavior. In recent years, developmental psychology has begun to devote significant attention to specific forms of prosocial behavior, such as sharing and helping. (A review is provided by Bryan and London, 1970).

Cooperation and generosity are personality traits specifically desired and encouraged by many parents and caregivers, largely beacuse such traits are intrinsically valued as developmental goals but in part also because these traits facilitate management of children and reduce conflict. Prosocial behavior is assessed in the NDCHS.

Affection

Affection includes those behaviors that express a warm or loving relationship with the caregiver and other children. Affection is considered an index of the child's emotional adjustment and happiness in the family day care home. The child's affection has also been considered indicative of the health of the child's attachment relationships. A comfortable attachment to a primary caregiver is essential so that a child feels safe to move freely and explore his or her environment.

Dependency

Dependency primarily refers to the child's tendency to seek emotional support from adults and their help with tasks. Dependency is part of a virtually universal development process that starts with the strong attachment of the infant to a primary caregiver, typically the mother (Bowlby, 1969). Most cultures apply some form of "socialization pressure" to channel the earliest expressions of dependency (e.g., physical clinging) into more mature forms of social behavior (Whiting & Child, 1953.) In Western culture, parents begin socializing their children for independence as early as their second year.

Between the ages of 2 and 4 or 5, the attachment-dependency phenomenon undergoes rapid differentiation. The universal phenomenon of attachment gives way to more specific clusters of behavior that can appropriately be labeled "dependent." For children in day care settings, some dependent behaviors decrease significantly over the specified age range (e.g., clinging to adults and overtly seeking affection or attention from adults), while other behaviors increase (e.g., seeking attention or approval from other children) (Heathers, 1955; Sears et al., 1965). A highly dependent 2-year-old is likely to manifest his or her need for nurturance by following or clinging, whereas a highly dependent 5-year-old is most likely to seek reassurance and attention. In the NDCHS, the amount of attention seeking and independent play that children exhibit is an indicator of dependency. Variations in dependency behavior between 1- and 2-year olds and 3- and 4-year olds are of interest.

Involvement

One kind of involvement is social involvement, which refers to the child's interaction with adults and other children, singly or in groups. The cluster is similar to what Schaefer (1975) has termed "extraversion," the child's attempts to be with and play with others, to make friends, and to seek out activities with peers. Social involvement is an index of the individual child's friendliness and ease in social situations. This can be assessed by the number of conversations he or she has with adults and children and the amount of time he or she spends involved with other children, watching or monitoring activities, or in isolation. Another type of involvement can be with materials. A child may be fully engrossed in a puzzle or drawing a picture alone. It is interesting to compare the time that children spend involved with other persons and materials with time spent just watching others or not involved. In the NDCHS, involvement is an index of the child's comfort in the day care environment, as well as of his or her willingness to participate and enjoy participating in the activities of the home.

Antisocial Behavior

The term "antisocial" is used to cover all hostile and negative behavior toward other children and adults, including but not limited to physical attack. It is also used to cover destruction or violent handling of property, such as breaking, kicking, or throwing toys. Other indicators are the amount of distress shown by children in the home.

The amount and kind of antisocial behavior that is acceptable varies widely from culture to culture. However, all cultures impose controls on some aggressive impulses, allowing aggression to be expressed only toward specified individuals in specified circumstances (e.g., self-defense, warfare, or revenge for specific offenses). Whiting and Child (1953, Ch. 4) surveyed the broad spectrum of socialization practices directed at controlling aggression in a large sample of non-Western cultures. Similarly, racial and socioeconomic subcultures in U.S. society may differ markedly in the degree of aggression they permit among children and in the ways in which they allow aggression to be expressed; however, some form of control is virtually universal. Antisocial behavior and distress are assessed in the NDCHS.

Cognitive Development

Parents, caregivers, policymakers, and child care researchers agree on the great importance for young children to develop their intellectual capacities to the fullest and perform with competence on problems presented by society. The cognitive development dimension includes language, problem solving, and exploration.

Language

Most child development experts agree that language is closely related to cognitive development. Language refers to the speech the child listens to, understands, and expresses. The following principles of cognitive development have gained increasing acceptance in early childhood literature (Andersson, 1969; John & Horner, 1971; Thonis, 1973; Litsinger, 1973):

- Language is related to the intellectual development of the child.
- Oral language grows out of a variety of experiences and opportunities to hear, comprehend, and speak.
- Language plays a critical role in a child's ordering process, particularly in his or her early years.

The sequence of a child's language development begins with experience (something he or she enjoys and wants to hear and talk about), progresses to talking and exchanging ideas and feelings, and then moves to increased ability to express himself or herself well (an important sequence in developing readiness for reading). The assumption made is that active verbal participation is first an important dependent variable (resulting from experience and the opporunity to talk) and then an independent variable (leading to skill in expression). An assessment of a child's verbal participation is most meaningful when conducted in a naturalistic setting. There is evidence that a child's ability to express himself or herself verbally reduces his or her frustration and level of aggression (Emmerich, 1966; Feshbach, 1969).

Strickland, Loban, and Hunt (Dixon, 1967) emphasize the interdependence of language usage and social emotional development of the child. They claim that the young child's most efficient and meaningful learning occurs under the necessities and pleasures of daily living. Among the factors that Strickland et al. identify as affecting language development are the amount, variety, and quality of language heard and used during the day; the variety of experience including nonthreatening, self-enhancing interactions with others; the opportunity to verbalize such experience; and encouragement of and opportunity for self-expression in language and through dramatic play or storytelling. The child's use of language and conversation is documented in the NDCHS.

Problem Solving

As important as language is, children also benefit from problem situations presented through visual images and actions or play. Otherwise, they may become overly dependent on language (Kagan, 1971). Observation of the young child at play will reveal increasingly mature types of play and open-ended problem solving as the child grows older (Hartley, 1952). The child progresses from simple, individual play at 2-years-old to increasingly social play at 3 to dramatization at 4. Other types of problem-solving are related to structured materials, e.g., stringing beads or working a puzzle. (The child has to figure out the one correct way to do it.) The extent to which these types of activities occur is assessed in the NDCHS.

Exploration

Generation of ideas and evaluation are also important components of cognition. Children are more likely to generate ideas and make discoveries in environments where caregivers provide a wide range of exploratory materials. These materials may be associated with fine motor or gross motor development as well as cognitive development. Activities such as dramatic play, dance, using play dough, or painting a picture offer opportunities to be creative as well as to develop fine motor skills. Although one cannot tell whether children do generate ideas, one can assess whether they engage in exploratory activities. The activities in which children engage are documented in the NDCHS.

Physical and Motor Development

Development of fine and gross motor skills is related to the child's total growth. The day care setting places children in the position of constantly comparing themselves and being compared with their peers. Thus, they rate themselves as stronger or weaker, more skilled or less skilled, fully equipped or handicapped, and attractive or not attractive in comparison with other children. The encouragement, acceptance, and reinforcement that children are given for their efforts to increase their motor coordination will be reflected in their skill and attitude. Solley and Murphy (1960) emphasize the relationship between gross motor experiences and perceptual-motor development. Prescott (1957) reports that concepts of self and readiness to attempt physical activities are profoundly influenced by the condition of the child's body and the kinds of skills he or she has developed in using his or her body.

Motor skills are often thought of in terms of gross motor and fine motor skills. Included in fine motor skills are practical self-help skills.

Gross Motor

Gross motor development refers to the development of large muscles such as those used to walk, run, climb, throw, or pull. The development of these muscles requires healthy bodies and opportunities to develop and use these muscles--riding tricycles, running, throwing balls. The child's involvement in gross motor activities is documented in the NDCHS.

Fine Motor

Fine motor development refers to development of small muscles such as those used to mix dough, complete a puzzle, or paint a picture. These activities require hand-eye coordination and are clearly related to conceptual development. Carew (1976a) separates these activities into fine motor structured and fine motor exploratory. Examples of fine motor structured activities are stringing beads or working a puzzle. Such activities have a definite structure with which the child must conform. To work a puzzle, a child must understand spatial relationships to see that a piece of puzzle fits into a particular space. Exploratory activities that require the use of fine muscles and hand-eye coordination include using play dough, water, and sand and finger painting. While the small muscles are being used in these activities, the child also has the opportunity to learn about texture, volume, and mass.

Self-Help

Self-help refers to children helping themselves with physical needs (dressing or feeding or toileting) and with helping do some household chores (pick up toys, make beds, or set the table). The rationale for encouraging self-help is elaborated in the section on caregiver variables. The extent to which children help themselves or are helped by caregivers is assessed in the NDCHS.

IV DEVELOPMENT OF INSTRUMENTS

This chapter describes the review and development process that occurred during Phases I, II, and III of this study. The selection and development of instruments occurred primarily during Phase I. The instruments developed and pretested during Phase I were then revised for use in Phase II and further refined for use in Phase III. The conceptual framework for the instruments is presented in the section describing the Phase I development. Only specific revisions to the Phase I basic instruments are discussed in the sections on Phases II and III.

Phases and objectives are summarized in Table 4.

Review and Selection of Instruments

Once the caregiver and child behaviors were selected for the observation study, the next task was to locate or develop instruments that could record those behaviors as they occurred in homes and quantify the extent to which they did occur. At the inception of the NDCHS, the SRI staff and Dr. Jean Carew conducted an extensive review of questionnaires, inventories, tests, and observation systems used by other child care researchers.

Tests, Scales, and Inventories

The search led to selection of several tests, scales, and inventories that had the potential of being useful in the study. The final selection was made on the basis of recommendations from consultants to NDCHS. The candidate instruments that were field tested include:

- Bayley Scales of Infant Development
- Denver Developmental Screening Test
- McCarthy Scales of Children's Abilities
- Pre-School Inventory
- The Home Observation for Measurement of the Environment
- Observation systems.

Table 4

SUMMARY OF PHASES AND OBJECTIVES OF THE NATIONAL DAY CARE HOME STUDY OBSERVATION COMPONENT

Phase	Dates	Site	Primary Objectives	Substudies Performed
I	6/28/76–9/30/77	San Francisco Bay Area (N = 49)	Review and select instruments Pretest--concentrated on developing observation system and training techniques. Revise observation system based on pretest.	Reliability study focused on possible bias of Black and White observers Validity (observer agreement with criterion)
II	10/01/77–3/31/78	Los Angeles (N = 99)	Pilot study--one of three sites in major observation study. Test all procedures, including cooperation between contractors in site development and scheduling of homes. Pilot test revised observation instruments and training procedures, data management, and analysis. Refine instrument package and site development procedures.	Reliability study focused on possible bias of Hispanic observers when contrasted with with non-Hispanic Black and non-Hispanic White observers Validity (observer agreement with criterion) Stability of caregiver behavior over 2 days
III	4/01/78–11/17/78	San Antonio and Philadelphia (N = 204)	Collect data for major observation study. Data used in final analysis.	Validity (observer agreement with criterion) Stability of caregiver behavior: hour to hour, week to week, and a.m. to p.m.
IV	11/18/78		Write a report describing family day care and summarizing activities of Phases I, II, and III.	

Several criteria were used to assess the appropriateness of these instruments. Table 5 presents these criteria and the properties of the candidate instruments. Field tests were carried out in San Francisco Bay Area homes. Our experience in using the instruments is described below, as are our decisions regarding their use.

Bayley Scales of Infant Development (BSID)

The BSID is a psychometrically sound instrument that is sensitive to small changes related to infants. Although it can be used with older children, it is most appropriate for children in the 12- to 24-month age range; this accounts for only a small sample of the children we wished to study in family day care. In addition, administration of the BSID poses problems of standardization in the homes. Many disruptions occur in day care homes, even with the assignment of an additional staff member to care for the children not being tested by the BSID. Consequently, confidence in the test results cannot be assured. Furthermore, the time and cost required to train people to administer the test are excessive.

Denver Development Screening Test (DDST)

The DDST was developed for use with children in the 12- to 54-month age range. Training paraprofessionals to administer the test and score the results is relatively easy and inexpensive. However, the DDST has psychometric difficulties. The norming sample is nonrepresentative, and the norms are not applicable to children from lower socioeconomic groups. In addition, researchers have criticized its reliability, particularly for children under 4 years of age.

McCarthy Scales of Children's Abilities (MSCA)

The MSCA assesses a wide range of children's abilities and is easy to administer and score. However, it is only applicable to children over the age of 44 months, thereby eliminating a large number of children in day care. Two testing sessions of 25 to 30 minutes each are required because of the length of the MSCA. A separate testing room is also needed for this

Table 5

PSYCHOMETRIC AND OTHER PROPERTIES OF INSTRUMENTS

Criteria	Bayley	DDST	MSCA	PSI	HOME	Play-Doh Factory	Play Village	Communication Game
Readily available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age range	2-30 mo	1.5-76 mo	50-102 mo	36-72 mo	0-30 mo & 31-72 mo	12-54 mo	12-54 mo	45.5-72 mo
Norming sample appropriate? (age, SES, cultural)	Yes	Questionable	Yes	Yes	Yes	Yes	Yes	Yes
Administration								
Average time*	45-60 min	15 min	50 min	15 min	60 min	10 min	20 min	10 min
Response mode	V/M†	V/M	V/M	V/M	V/M	Verbal	V/M	Verbal
Needs caregiver	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Training for administration*	Difficult	Simple	Simple	Moderate	Difficult	Simple	Simple	Simple
Scoring complexity*	Simple	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Psychometric soundness								
Test-retest reliability	Mental 76.4% Motor 75.3%	90-100%	.77-.91	.83	NA‡	NA	NA	NA
Internal consistency	Mental .81-.93 Motor .68-.92	NA	.70-.96	.82	.44-.89	NA	NA	NA
Interobserver reliability	Mental 89% Motor 93%	80-95%	NA	NA	.90	NA	NA	NA
Validity estimates	Mental .57	.73-.92	NA	NA	.28-.56	NA	NA	NA

---

*Determined from results of pilot testing.

†V/M = verbal/motor.

‡NA = not applicable.

instrument. The need for a testing room poses two problems: nonavailability of a separate room in many homes and unwillingness of children to accompany and remain with the tester in a separate room for the duration of the test.

The Pre-School Inventory (PSI)

The PSI was designed to assess several different areas of the child's cognitive development such as language development, comprehension, and ability to follow directions. It also examines the child's familiarity with a number of objects and events that are generally common to his or her world. It is satisfactory for use with children of 3 or 4 years of age. Although it is relatively easy to administer, the home setting poses a problem in that several different materials are used by the child and a child-sized table and chair are needed in a room separate from other children.

The Home Observation for Measurement of the Environment (HOME)

HOME, by Bettye Caldwell, is a measure of the quality of care the children receive from the caregiver. HOME assesses the emotional, social, and cognitive support that the caregiver provides the children. Specifically, the inventory assesses such caregiver behaviors as emotional and verbal responsivity, involvement with the child, avoidance of restriction and punishment, provision of appropriate play materials, provision for independence from adult control, and provision of a stimulating physical and language environment. These are variables of interest to the study, but the categories are subjective and extensive training is required for administering the HOME. (The estimated time for training to administer is 40 hours, distributed over a 2-week period). Also the inventory requires that the caregiver supply a great deal of information about the children that only parents might know.

Results of the Field Tests

Results of the field testing of test and interview instruments were discussed with NDCHS consultants. None of the five instruments tried in the field tests was found to be acceptable. Test results led to two conclusions: (1) a comprehensive picture of day care is more likely to emerge when children and caregivers are described in their natural settings and (2) observations would be a more sensitive tool for gathering these data than would interviews or tests.

The test and interview instruments examined had several formidable flaws. None, except the DDST, was appropriate for the total age range that we had selected to study. Consistency in the instrument package was needed because it was necessary to make comparisons across homes and age groups. A second problem arose from the fact that children in family day care homes are not likely to be familiar with school-like tasks, such as the tests represent. Several of the tests were normed using children in preschool settings. Thus, the testing situation itself may be a source of differences in test scores. Furthermore, many homes do not have appropriate space for a tester to work, that is, a place where the child is not distracted. We considered renting vans and preparing them as standardized testing rooms, but cost factors and the questionable practice of taking the child out of the home forced abandonment of this idea.

Several of the developmental scales required the presence of the caregiver. This presented a problem because either the other children would be left alone during that time or another caregiver would be required. Some of these scales were meant to be administered to parents, and we discovered that caregivers could not answer all the items. This was especially true when the child was a recent arrival in the home.

Observations

This was a descriptive study, not an attempt to assess child behavior as outcomes of caregivers' programs. We became convinced after the field tests of other instrumentation that observations would provide the most accurate description of what was happening in family day care homes in terms of caregiver and child behaviors.

At the time of the field tests, a thorough review of observation instruments used in studies of homes was conducted. The following criteria were established to guide the selection of observation instruments:

- The instruments must be able to record socioemotional, physical motor, and cognitive behaviors.
- The data must reflect free-flowing, rapidly changing, and normally unstructured behaviors and activities found in homes.
- The data must describe principal activities and behaviors of caregivers and children between the ages of one and five years.
- The instrument must reflect behaviors that occur in homes of different ethnic groups.
- The instrument must be able to be learned reliably by observers in a relatively short time.

The literature review and contacts with investigators engaged in pertinent research uncovered few observation instruments that satisfied all these criteria. Observation instruments developed by the following investigators were examined: Caldwell (1966); Carew, Chan, and Halfar (1976); Clarke-Stewart (1973, 1976); Everson and Ambron (unpublished); Golden (1973); Kagan, Kearsley, and Zelaszo (1976); Kessen, Feine, Clarke-Stewart, and Starr (1975); Layzer and Goodson (1977, unpublished); Prescott (1973); Prescott-SRI (1976); and Ristau, Hamilton, Blaney, and Smith (1976).

The instruments reviewed were helpful in suggesting categories, definitions, and ways of solving various methodological difficulties, but none seemed precisely suited to the purposes of this study. In several cases, the procedures were simply too complicated to enable us to train observers within the limited time available. In other cases, the age-group for which the instruments were developed did not match the age-group of this study. In still other cases, the contexts in which the observations were conducted were not similar enough to those of day care homes to be applicable. Ultimately, therefore, we decided to modify instruments or develop new ones, drawing ideas from the work of others, and to subject these instruments to rigorous testing, revision, and retesting during Phase I of the study. Four instruments were examined in greater depth to determine whether they could be modified appropriately. Several structured observations used in the National Day Care Cost Effects Study were also examined.

Prescott/SRI Child-Focused Observation Instrument

The Prescott/SRI child-focused observation instrument was designed to record the behavior of 3- and 4-year-old children within the context of day care centers. Four dimensions describe child initiation, thrustings, receiving, and response. Within these are 45 more discrete codes. In using the Prescott/SRI instrument in local day care homes, we determined that what was needed was an observation instrument that could focus more directly on the caregiver and child behaviors and interactions with a wide range of infant to school-age children.

SRI Adult-Focus Preschool Observation

The SRI adult-focused observation instrument was designed primarily to record verbal interactions between adults and children in preschool settings. It records who speaks to whom, the content of the interaction, and the affect. In local pretests, we found that many of the actions of adults in homes are not verbal or interactive (e.g., they are doing household tasks, watching television, and the like). Thus, this instrument is not particularly sensitive to the home environment.

Golden's Observation Instrument

The instrument Golden developed for use in New York City infant care studies has a wide range of categories and codes. Although it records both child and adult behaviors, it is designed to observe the behavior of infants, and we had difficulty adopting it for older children.

Carew's Observation Instrument

The Carew instrument was developed to record the behavior of children 12 to 33 months old. The observations consist of descriptions of the child's activities and of the human and physical environment insofar as they play a role in these activities. Carew also documented persons' contacts with the child, recording how much time the mother or caregiver spent talking, teaching, scolding, praising, or playing with him or her. With some modification, this instrument could be used with children up to school age.

Structured Situations

A set of structured situations was prepared to supplement the data collected in natural observations. The purpose of using structured situations was to increase the opportunity for gathering data on behaviors that may occur infrequently or not at all during the observation period in the natural setting of family day care. Carefully structured activities presented in each home introduce a uniform situation and a set of variables that can be evaluated across all homes.

Two structured situations proposed for use had been field tested and used in the National Day Care Cost Effects Study. With the Play Doh Factory, the caregiver is asked to teach the children how to use this new toy. With the Play Village, the caregiver is asked to present the new toy to the children. A third structured situation was proposed that required the caregiver to show the children a book. These situations had the potential of promoting the following caregiver and child behaviors: teaching, controlling, directing, helping, participating, comforting, prosocial sharing, distress, positive affect, and negative affect.

Recommendations of the NDCHS Consultant Panel

At the conclusion of the field studies and literature review, the NDCHS panel of consultants recommended that we develop a comprehensive observation system that could record the behaviors of caregivers and children in day care homes. They also suggested selection or development of a set of structured situations to assure some consistency of caregiver and child activities across homes, as well as observations of the natural setting. Further, they recommended that general descriptive data be collected that could not be captured by an objective observation system. These data were intended to describe how the caregiver planned and managed her day; the health, safety, and child equipment features of the home; and a judgment by the observer regarding the physical, social, and cognitive environment of the home. A caregiver interview based on Caldwell's HOME inventory was also recommended; it assessed the caregiver's attitude toward caring for children. Consultants rejected the use of standardized tests in the NDCHS.

Phase I Developmental Process

Under the guidance of Dr. Carew, several instruments were developed for use in the first pilot study conducted in the spring of 1977 in the San Francisco Bay Area (Phase I). The Adult Behavior Codes (ABC) and the Book Tally were used for observing adults, and the child behavior Snapshot was used for observing children. Three structured situations were developed to assure some consistency of activities that were observed in homes. The Daily Log was designed for observers' use in describing problems and unusual events that occurred during the Phase I data collection. In addition, an interview was developed to gather information about caregivers and specific children.

Observations

The central purpose of the observation component of the NDCHS was to describe day care homes. The caregiver provides the physical, socioemotional, and cognitive environment of the home and consequently was the focus of the observations. The observation system--the primary data source--provided comprehensive documentation of how the caregiver and the children spent their time.

Another consideration in instrument development was that the instruments be appropriate to the home day care setting, that intrusiveness be kept to a minimum. Although reflecting the free-flowing, rapidly changing, and normally unstructured behaviors and activities that typify day care homes was important, we also wished to introduce and observe some common situations in each home that would enable us to compare certain key caregiver and child behaviors across homes.

To describe as fully as possible the social, emotional, and cognitive environment of day care homes, we decided to develop an observation system that could be used to record adult and child behaviors in both natural and structured situations. The observation system Carew developed and used in her research on children in homes and day care centers appeared to be a promising place to start.

An adult observation instrument and a child observation instrument constitute the Carew/SRI Observation System designed for the NDCHS. The instruments developed in Phase I were modified for use in Phases II and III. Descriptions follow of the instruments as they were originally designed and of the modification process each underwent.

Carew/SRI Adult Behavior Codes (ABC)--Phase I

Under the guidance of Dr. Carew, we developed a set of Adult Behavior Codes (ABC). The main purpose of the ABC is to record:

- Which caregiver is interacting with children (for homes with more than one adult).
- The child or children with whom the caregiver interacts.
- How the caregiver interacts with children using strategies likely to facilitate their activity, restrict their activity, or some other strategy.
- The type of activity that the caregiver facilitates, restricts, or is otherwise involved in with the children.
- The caregiver's expression of positive, negative, or neutral feelings toward children.
- The caregiver's use of language in her interactions with children.

The conceptual framework of the ABC system was similar to that used by Carew and co-workers in their previous research on children in home and day care centers (1975, 1976a,b) and by Golden et al. (1978) in their ongoing study of infant day care in New York City. These instruments differ from the ABC in that their target of observation was the individual child rather than the caregiver. However, the caregiver's behavior was covered in considerable detail in Carew's and Golden's procedures, and we incorporated many of the codes used in those procedures in the ABC system.

The dimensions of the first version of the ABC are described below. Table 6 gives a sample ABC coding frame* as developed and used in Phase I and lists the codes for each dimension.

---

* When completed, each coding frame is a record of the behaviors observed during a 3-second "observe" interval, signaled by an electronic device used by each observer.

Table 6

SAMPLE ABC FRAME--PHASE I

25 36

		FACILITATE				RESTRICT			OTHER		
Who	To Whom	How	What		C Rsp	How	What	Explain		Emot.	Lang.
M1 1	C1 1	TE 1	LI 01	WK 07	AC 1	R 1	DG 1	Yes 1	AF 1	+ + 1	L 1
M2 2	C2 2	PP 2	FS 02	PN 08	PS 2	HR 2	AS 2	No 2	CM 2	- - 2	S 2
M3 3	C3 3	HP 3	FE 03	ET 09	IA 3		WL 3		CV 3	NU 3	No 3
OC 4	YC 4	RE 4	DP 04	NT 10	MX 4		AV 4		SV 4		
AD 5	GP 5	SG 5	MD 05	PS 11			RQ 5		NC 5		
OR 6	OC 6	PR 6	GM 06	O 12			O 6				
	AD 7										

The Who dimension codes which of several possible caregivers is the target of the observations. The observer always codes the behavior of the caregiver who has primary responsibility for the children (M1) unless she has temporarily left the children in the charge of another regular caregiver (M1, M2), adult (AD), or older child (OC). The code OR is used when the caregiver is out of range.

The To Whom dimension codes the identity of the other person or persons with whom the caregiver interacts. Three children were selected beforehand as target children (C1, C2, C3), representing different age groups between 1 and 5 years. The codes C1, C2, and C3 are used when the caregiver interacts individually with any of these target children. Other codes are used when the caregiver interacts with any other 1- to 5-year-old child (YC), with any child over 5 (OC), with an adult (AD), or with a group of two or more children (GP). These codes thus enable us to construct profiles of the interactive experiences that three representative target children have with the caregiver.

The Emotion dimension codes the affect expressed by the caregiver as positive, negative, or neutral. The positive and negative codes are defined to pick up clear evidence of affect such as laughing or expressing anger; mild displays of affect are coded as neutral. The decision to narrow the definition was made because experience in previous research indicated that although observers usually agree on how to code behaviors falling toward the extremes of this dimension, they often disagree in coding intermediate behaviors, despite elaborate training.

The Language dimension codes whether the caregiver spoke four or more words during the observation unit (L), less than four (S), or no words (No). Admittedly, this is a simple way of characterizing the language milieu provided by the caregiver, a factor that many previous studies single out as important to the cognitive development of children. More sophisticated psycholinguistic distinctions might have been incorporated in this dimension, but we finally decided that this would place too great a burden on observers unless they were offered specialized training. Consideration was also given to distinguishing the various functions for which the caregiver uses language. Distinctions among these functions are an important part of the ABC and are included in the remaining dimensions of the ABC rather than in the language section.

The four dimensions just described are always coded unless the caregiver is out of range (OR) or is involved in housekeeping or other nonchild activities. The remaining seven dimensions of the ABC are grouped under three headings that refer to the type of technique used by the caregiver in interacting with the child: facilitate, restrict, and other. The observer first decides whether the caregiver's technique is facilitative, restrictive, or other. When the caregiver uses a facilitative technique, the observer codes the particular technique in the "How" column under "Facilitate," the activity that the caregiver is facilitating in the "What" column, and the child's response to the caregiver's technique in the "Child Response" (C Rsp) column. Similarly, if the caregiver uses a restrictive technique, the observer codes the particular technique in the "How" column under "Restrict," the child's activity that is being restricted in the "What" column, and the explanation that the caregiver offers to the child in the "Explain" column. Techniques not included under "Facilitate" or "Restrict" are coded in the "Other" column.

The Facilitate-How column as first used includes six strategies that caregivers commonly use to promote, guide, or participate in activities with children and to foster their learning of skills and concepts. These caregivers' behaviors are similar to those used in Carew's research and include teaching (TE), playing/participating (PP), helping (HP), reading (RE), suggesting (SG), and praising (PR). The element common to these techniques is that the caregiver takes the time and makes the effort to involve herself directly and positively in the child's activities. Her purpose may be to teach, to convey relevant information, to listen to the child's ideas or to share in the child's activity; to help a child who is having difficulty; to encourage a child to undertake an activity; or to show approval for an activity. In so doing, the caregiver often helps to create, sustain, guide, and structure the activity for the child, thereby strongly influencing the character of the activity as distinguished in the "What" codes.

The Facilitate-What columns list 11 categories of activity that caregivers tend to facilitate for children. These include teaching language and conveying nonroutine information (LI), activities involving complex eye-hand coordination and nonverbal reasoning (FS), exploratory play using the small muscles (FE), dramatic play (DP), music and dancing (MD), gross motor play (GM), household chores (WK), care of the body (PN), watching educational TV programs (ET), watching noneducational TV programs (NT), and prosocial behavior (PS).

The distinctions made among activities in the "What" columns are similar to those used in Carew's studies of children in the home and in day care centers. In both of those studies (1975, 1976b), Carew reported that the frequency of the caregiver's facilitation of three types of activities for children between ages 1 and 3--language information (LI), complex eye-hand coordination (FS), and dramatic play (DP)--strongly predicted children's scores on cognitive tests including the Stanford Binet, a test of spatial skills/nonverbal reasoning, and a test of receptive language. Thus, to the extent that caregivers in this study are observed to facilitate these three specific types of activities, we can say with some confidence that they are helping the children to learn the skills and concepts that are assessed in commonly used cognitive tests and are regarded as important by preschool educators and developmental psychologists.

The remaining categories of activities in the "Facilitate-What" columns are included because these are activities in which caregivers frequently become involved with children, and variation in their occurrence from caregiver to caregiver tells something about what activities she considers worthwhile.

One other category of interaction, prosocial behavior, is of special interest because it indicates the caregiver's attempts to guide and encourage the child to consider the needs and wishes of others and to understand and conform to social rules. It is not unreasonable to assume that the caregiver's facilitation of prosocial behavior in children fosters their social development.

The Phase I ABC includes a Child Response column, in which the observer codes whether a child's behavior in interaction with the caregiver was active-attentive (AC), passive-attentive (PS), inattentive (IA), or mixed (MX). Whether the attentive child is active or passive in a learning activity with the caregiver is a theoretically important distinction. For example, Piagetian theory emphasizes the need for the child to operate actively on materials and to construct his or her own learning experience through attempts at mastery. Traditional learning theory on the other hand views the child's reception of well-structured input from others as a major way in which children learn.

In the Restrict-How column, the observer codes the intensity of the caregiver's restrictive behavior as simply restrictive (R) or particularly harsh (HR). Research results are mixed on the effects of caregiver restrictiveness on the development of children. Results seem to depend to a great extent on the social class and culture of the research sample. However, most researchers agree that, regardless of social class or ethnicity, the frequent use of harsh methods (e.g., physical punishment) is negatively related to cognitive and social development in young children. Bearing these findings in mind and anticipating considerable class and cultural heterogeneity in the NDCHS, we decided to contrast methods of restriction that are likely to be universally regarded as harsh with others that are not likely to be so perceived.

In the Restrict-What column, the observer codes the type of activity that the caregiver restricts, including dangerous behavior (DG); antisocial behavior (AS); wild, noisy, disorderly behavior (WL); other activities (AV); and requests by the child for help, information, materials, or permission (RQ). It is expected that competent caregivers will restrict dangerous, antisocial, and disruptive behavior, although the frequency of such restrictions may depend greatly on the age and other characteristics of the child.

In the Restrict-Explain column, the observer codes whether the caregiver offers any reasonable explanation to the child for her restriction.

In the Other column, the observer codes those caregiver behaviors that have not been included under the "Facilitate" or "Restrict" headings. The first three categories--affection giving (AF), comfort giving (CM), and social conversation (CV)--describe caregiver behaviors that are positive and have a clear socioemotional intent. The remaining two categories, supervision of children's activities (SV) and nonchild activities such as housekeeping tasks (NC), describe behaviors that are frequently observed but require no direct interaction with the child.

Carew/SRI Child Behavior Snapshot (SNAP)--Phase I

The Phase I SNAP was used alternately with the ABC. The observer watched the behavior of the first target child for 3 seconds. She coded the child's activity, with whom the child was interacting, and the child's use of language in the next 27 seconds. She then watched in a set sequence the behavior of the second target child, the third target child, and each other child whom she could conveniently locate.

The main purpose of the Phase I SNAP was to describe briefly the activities of all children present in the day care home. The SNAP was a necessary supplement to the ABC because the ABC does not record the activities of children unless they are interacting with the caregiver. In developing the SNAP, we seriously attempted to develop a more elaborate instrument in which child behavior could be recorded in as much detail as caregiver behavior in the ABC. Two major problems stymied these efforts. First, many different children, often of different ages and capabilities, had to be observed. Second, although an attempt was made to have definitions in the child behavior codes similar to those of the ABC, familiarity with the ABC tended inevitably to interfere with the observers' learning the behavior codes and vice versa. In the end, we decided to adopt the simpler SNAP system described here, recognizing that after the pilot study this instrument might be further elaborated in time for Phase II.

In using the SNAP, the observer coded categories on three dimensions: (1) child's activities (categories in this list were identical or similar to those included in the ABC), (2) the person with whom the child was interacting (self, another child, the main caregiver, another adult), and (3) whether the child used intelligible language.

Structured Situations--Phase I

In Phase I, three structured situations were introduced and observed in each home to supplement the natural observations. In the structured situations, a book and two toys were introduced in each home and each caregiver was given the same set of instructions for presenting the activity to the children. The three structured situations were the Play-Doh Factory, the Play Village, and Reading a Book. These situations were presented to the caregiver toward the end of the morning on two separate days. The directions are described below.

Play-Doh Factory

In the Play-Doh Factory task, the caregiver was asked to show the children how a machine or cookie cutters could be used to make shapes out of Play-Doh. The main purpose of this task was to observe the caregiver's (1) approach to teaching a skill requiring fairly complex eye-hand coordination and nonverbal reasoning and (2) methods of encouraging prosocial behavior and discouraging antisocial behavior in children. Because only one child can use the factory at a time, this situation provided many opportunities to observe how the caregiver encourages prosocial behavior, such as taking turns, helping, sharing, and showing interest in other children's products, and how she discourages antisocial behavior, such as squabbling, grabbing, hoarding, and disparaging another person's efforts. The observer recorded the caregiver behaviors on the ABC during this task.

Play Village

In the Play Village task, the caregiver was asked to give the children a Play Village with which they could all play simultaneously. The Play Village is large and has many different manipulable parts and accessories that are appealing to children over a wide age range. SRI expected the caregiver to introduce the Play Village to the children briefly and then leave them to play with it on their own, intervening perhaps only when squabbles occurred. The observer recorded the child behaviors on the child observation instrument.

Reading a Book

The caregiver was asked to read or tell a story from a simple book (Kitten for a Day by Ezra Keats). The book has many colorful pictures and little text, so caregivers with poor reading skills were not placed at a disadvantage. It tells the story of a puppy who, for a day, experiences what it is like to be a kitten. The main purpose of this task was to assess the caregiver's manner of reading or telling stories to children. Did she encourage them to participate actively by asking questions? Did she go beyond the text to offer explanations, label, or discuss concepts? Did she encourage them to associate the characters/events in the story with characters/events in their own lives? Did she encourage children to understand the feelings and motivations of the characters in the story?

A Book Tally was used to code the caregiver's behavior in the structured book situation. Unlike the ABC and SNAP, this procedure tallies every relevant caregiver behavior occurring during the reading session rather than only those that ensue within arbitrary 3-second units. This procedure allows more behaviors to be recorded per unit of time. However, to achieve observer reliability, only a few categories of behavior can be tallied. Fortunately, our pretest experience with this situation showed that caregivers as a group tend to exhibit a rather narrow range of behaviors, which can be accommodated in a short list of categories. However, we expected enough variation from one caregiver to another to enable us to discern major individual differences in skill and style. (See Appendix B for the Book Tally form.)

Daily Log--Phase I

In the Daily Log, the observer described:

- Interruptions to the schedule, including any unusual happenings or problems such as the focus child becoming ill, visitors, or children not present.
- Events that are difficult to code, including caregiver behaviors that were too subtle or complex to be recorded on the instrument, or problems in observing the caregiver.
- Caregiver attitudes, such as feelings regarding the presence of an observer, the study, or the ethnicity of the observer.
- Any information that may help the research contractor's data collectors when they visit the homes.
- Indications of data believed to be invalid, such as codes that do not accurately reflect what is happening in the home.
- Incomplete data, such as visits where the required number of natural situations and the assigned structured situations and information sheet were not completed and the reasons why.
- The observer's opinion of the general atmosphere in the home.

A sample of the Daily Log is presented in Appendix B.

Stages of Development in Phase I

Initially, three observation instruments were developed to record events in the homes in both natural and structured situations:

- Adult Behavior Codes (ABC), used in natural situations and in the Play-Doh Factory and Play Village structured situations.
- Child Behavior Snapshot (SNAP), used in natural situations and in the Play Village structured situations.
- Book Tally, used in structured reading situations.

These instruments went through several stages of development in Phase I. The work started in November 1976 and progressed through the following sequence:

(1) Preliminary design on paper of conceptual framework, variables, definition, and format.

(2) Application of preliminary instruments to videotapes collected in Black and White day care homes in natural and structured contexts. Revision of instruments.

(3) Requests for critique of instruments from individual consultants, Drs. Sueanne Ambron, Ned Flanders, Asa Hilliard, Eleanor Maccoby, Donald Medley, and James Young.

(4) Presentation of instruments and exemplary videotapes at a conference for critiquing by consultants experienced in research on Black and White children by representatives of Abt Associates, Inc.; Center for Systems and Program Development; and Westat, Inc. (the three other organizations participating in the NDCHS during Phase I), and by representatives of the sponsor, Office of Child Development. Revision of instruments in the light of suggestions made by those attending the conference.

(5) Use of revised instruments to code new videotapes and behaviors of Black and White caregivers in day care homes. Further revision of instruments.

(6) Production of a series of edited videotapes for training observers to understand categories and codes, time units for observing and recording behavior, and the complex and rapidly changing nature of the behaviors to be observed. Production of criterion videotapes to be used at the end of the training period to judge an individual observer's coding accuracy and ability to conduct the observations for the pilot study.

(7) Final revision of instruments and manuals and other training materials. This work included coding all videotapes to be used in training, reviewing, and revising coding definitions and examples and using the instruments in Black and White day care homes to obtain preliminary estimates of interobserver agreement.

(8) Data were collected in 46 Black and White caregiver homes in the San Francisco Bay Area.

Phase II Modifications

Revisions of the instruments used in the Phase I pilot study began early in the summer of 1977. Los Angeles was selected for the Phase II study site, and the sample of homes was to include Black, White, and Hispanic caregivers. To ensure that the observation coding systems could record culturally specific caregiver and child behaviors, SRI hired Hispanic and Black consultants and staff to assist in revising instruments.

The adult and child observation instruments were revised to incorporate changes suggested by consultants and by the results of the Phase I analysis. These changes are described in detail later. Modifications to the ABC included combining, redefining, and rearranging certain codes and dimensions. The SNAP was eliminated, and a new format for the child behavior instrument--the Child Codes (CC)--was designed and tested. The structured situations and Daily Log were not changed, but the caregiver inventory was replaced by a shorter version referred to as the Information Sheet.

On the basis of Phase I experience, revisions were made in some of the procedures. An important change was made in how the children to be observed were selected.

Selecting Children To Observe

Our experience with the SNAP in Phase I taught us that observing all children in each home was impossible. Typically, day care homes provide care for children of a variety of ages, ranging from infants through preschoolers to school-age children. Because it was necessary to devise only one child-focused instrument and because the intent of the study was to learn about young children who spend a minimum of 20 hours per week in the home, the child-focused instrument was designed to observe only those children aged 12 to 59 months. Infants and older children were excluded because their behaviors are too disparate to be reflected by a single instrument.

For analysis, the data were further divided according to children's age. Children pass through many developmental stages between the ages of 1 and 5, and their needs can vary considerably at different points during that period. For example, an older child may benefit from an increase in intellectual activities whereas a younger child may need additional attention given to physical needs. To obtain age-relevant information efficiently, the data were recorded and analyzed according to two major age groups 12 to 35 months and 36 to 59 months. We selected these two categories of ages primarily because 3- and 4-year-olds are commonly thought of as preschoolers and children up to the age of 3 are often considered toddlers. Three- and 4-year-old children are likely to have developed more language and self-help skills, and the activities in which they engage are likely to differ significantly from those of the toddler. Focus Child 1 represented the younger of the two groups.

This revision made it possible to identify when the caregiver was interacting with a younger child or an older child. The impact of these revisions is detailed in the following section.

Changes in Carew/SRI ABC for Phase II

Methodological revisions in the observation instruments were guided by analysis of observer ability to record the data reliably. Data were collected in each home on two consecutive mornings. To examine the observers' ability to code correctly, we paired each observer with another for the second hour during both mornings' observations. Using the primary observers in the field observations of Phase I as the criterion, we constructed confusion matrices to study how "reliability observers" coded when they disagreed with the primary observer on the ABC codes. The observers synchronized their beeper signals and coded simultaneously. The confusion matrices include all codes for all dimensions and are displayed in Tables 7 through 17. For each dimension, the numbers in the columns represent frequency of individual codes recorded by the reliability observers. Numbers in the rows represent frequency of codes recorded by the primary observers. Each column and each row is labeled with a code abbreviation. The numbers in the column and row labeled "0" represent frequency of occurrences of no code recorded.

For each code, frequency of agreement between observer pairs was found in the cells that form the principal diagonal of the matrix. Row and column cells outside the diagonal show which codes were confused with one another. Revisions to the ABC were suggested by examining the codes that were most often confused by observers. If many observers had difficulty with codes, we assumed that the code definition needed to be clarified. If only one or two observers had difficulty with a code, we assumed that the code definition was adequate but that the individual observers needed help.

The discussion starts with the four dimensions of the ABC that are coded in almost every frame--Who, To Whom, Emotion, and Language. Recommendations for the Facilitate, Restrict, and Other sections of the ABC follow.

Who--The scarcity of numbers outside the principal diagonal of the matrix for the Who dimension (Table 7) showed that observer agreement in coding this dimension was high. The little disagreement that did occur was about whether the primary caregiver should be coded as present or as out of range (OR). Considering that observers were instructed to code the caregiver as OR if she left the room and following her would be inconvenient or obtrusive, most likely only one of the two observers was positioned so as to be able to see the caregiver after she left the room.

Because a third caregiver in the home (M3) and adult (AD) were not coded at all and an older child (OC) was coded once by only one observer, those distinctions were not made in the Phase II version of the ABC. Instead, an other person (OP) code was used to represent the Phase I codes for a second and third caregiver, older child, and adult.

Table 7

CONFUSION MATRIX FOR THE WHO DIMENSION

Primary Observer		Reliability Observer						
		0	M1	M2	M3	OC	AD	OR
No Code	0	0	7	0	0	0	0	1
Primary Caregiver	M1	22	4,086	0	0	0	0	30
Caregiver 2	M2	0	9	129	0	0	0	0
Caregiver 3	M3	0	0	0	0	0	0	0
Older Child	OC	0	1	0	0	0	0	0
Adult	AD	0	0	0	0	0	0	0
Out of Range	OR	0	13	1	0	0	0	287

To Whom--Although the agreement between paired observers coding the To Whom dimension was acceptable, the confusion evidenced was greater than expected. Examination of the confusion matrix in Table 8 revealed that more disagreement between observers occurred in coding the focus of the caregiver's attention as Group (GP) than in any other single code in this dimension. This confusion is attributed to the difficulty of distinguishing whether a caregiver was speaking to a group or to one member of a group when no name was used.

Because 12% of the children in homes in the pilot study were under 1 year old, a code was added in the To Whom column to represent babies (BA). For Phase II, only two target children were examined, C1 to represent a child of 12 to 35 months and C2 to represent a child of 36 to 59 months. Younger child (YC) represented other children from 12 to 59 months, and older child (OC) represented other children of 5 years of age and older.

Table 8

CONFUSION MATRIX FOR THE TO WHOM DIMENSION

Primary Observer		Reliability Observer 0	C1	C2	C3	YC	GP	OC	AD
No Code	0	1,199	19	23	11	11	72	3	8
Focus Child 1	C1	23	494	36	6	9	57	4	0
Focus Child 2	C2	16	27	405	30	8	56	2	0
Focus Child 3	C3	7	6	11	228	8	32	3	0
Young Child	YC	12	6	11	4	359	26	12	1
Group	GP	79	61	47	48	28	747	13	8
Older Child	OC	1	3	4	0	6	11	82	0
Adult	AD	15	2	1	5	0	7	1	174

Emotion--In an effort to reach reliability, observers were instructed to code only the extremes of caregiver emotion as positive or negative; that is, only a laugh or great enthusiasm was to be coded as positive and only a demeaning remark or anger as negative. As a result, positive and negative affect were coded infrequently. Table 9 shows that there were only 68 occurrences of positive (++) and 7 occurrences of negative (--) emotions; all other frames in which emotion was coded recorded neutral affect (NU). The low frequency rates of both positive and negative emotion indicate that expanding the definitions of these codes was desirable. In later versions of the ABC, the definitions of the positive and negative codes were broadened to include smiles and frowns, respectively.

Language--Because Language is the last column of the ABC frame to be coded, a low rate of agreement between observers was expected on this dimension. Table 10 shows that observers agreed 1,043 times (79.4%) that the caregiver used "long" (L) language (four words or more) and 1,867 times (85.4%) that she used no (NO) language in her interactions with children. On the other hand, observers disagreed more often than they agreed on the caregiver's use of "short" (S) language (fewer than four words). Considering that the definitions of "long" and "short" language are so rudimentary

Table 9

CONFUSION MATRIX FOR THE EMOTION DIMENSION

Primary Observer		Reliability Observer			
		0	++	—	NU
No Code	0	291	0	0	24
Positive	++	0	7	0	31
Negative	—	0	0	1	5
Neutral	NU	63	30	1	4,135

Table 10

CONFUSION MATRIX FOR THE LANGUAGE DIMENSION

Primary Observer		Reliability Observer			
		0	L	S	No
No Code	0	291	2	5	13
Long	L	6	1,043	171	94
Short	S	8	240	356	174
No Language	No	43	119	156	1,867

and that the difference between the two codes is so slight (a matter of one word more or less), the Phase II language dimension was limited to two codes, Yes and No (indicating use of language and nonuse of language).

Facilitate-How--Table 11 shows that observers frequently and about equally confused four of the six caregiver facilitative techniques in the Facilitate-How dimension. The four codes--teach (TE), play/participate (PP), help (HP), and suggest (SG)--describe only slightly different techniques used by caregivers to promote or encourage children's activities and learning. When a caregiver's behavior is somewhat ambiguous, observers can easily interpret it differently. For example, a caregiver holds out her hands to a child who is learning to walk. Depending on how the observer interprets the action, the caregiver could be offering physical help to the child (HP), by holding out her hands she may be encouraging the child to try (TE), or nonverbally suggesting that the child take a step (SG). With such fine distinctions, we were not surprised that the four codes were often confused by observers. To overcome this problem, TE, PP, HP, and SG were defined more discretely.

Table 11

CONFUSION MATRIX FOR FACILITATE-HOW

Primary Observer		Reliability Observer 0	TE	PP	HP	RE	SG	PR
No Code	0	2,634	38	61	58	0	79	8
Teach	TE	34	290	32	40	4	33	4
Play/Participate	PP	75	34	175	31	1	29	2
Help	HP	76	30	40	373	0	31	3
Read	RE	0	3	1	0	24	0	0
Suggest	SG	78	30	23	22	0	163	2
Praise	PR	6	4	4	2	0	1	10

The two remaining codes, Read (RE) and Praise (PR), which occur infrequently, were subsumed in this dimension under Teach, because both reading and praising can be considered teaching techniques.

Facilitate-What. Carew's research on day care children showed a relationship between children's cognitive test outcomes and four of the activities that appear in the Facilitate-What column of the ABC: language/information (LI), fine motor structured (FS), fine motor exploratory (FE), and dramatic play (DP). Data from the Phase I pilot study indicate that a relationship may also exist between three of these activities and caregivers' facilitative techniques. Therefore, LI, FS, DP, and FE were retained in the Facilitate-What dimension of the Phase II version of the ABC, even though the matrix of this dimension shows some confusion between some of the codes.

In the paired reliability observations, coders showed acceptable agreement in recording LI activities, but Table 12 indicates some confusion by observers in coding FS and FE. The differences in the two fine motor codes are subtle, and it was expected that they would be confused often enough to warrant combining them eventually. However, in view of pilot study data showing positive correlations between caregiver facilitative techniques on the ABC and children's engagement in FS activities on the SNAP and no apparent relationship between these caregiver techniques and children's engagement in FE activities, it seemed important to retain FS and FE as two separate codes. This, of course, required more careful attention to clarifying the distinction between the two codes in the revisions of the observation instruments.

The fourth of these activities, dramatic play (DP), was coded comparatively infrequently and was sometimes confused with LI and even with FS and FE. Our experience with recording dramatic play and pretend behaviors in other observation instruments was similar. Observers often overlook it, recording instead the activity in which it takes place. Because preserving the activity may be important (according to Carew's research), we gave considerable thought to clarifying the definition of dramatic play and improving the training on this code.

Another of the Facilitate-What activities, work (WK), was defined as household chores, including setting the table, washing dishes, and picking up toys. Observers confused it most often with FE activities, which indicated that some observers might have detected a change in a child's activity (for example, from picking up toys to playing with toys or from

Table 12

CONFUSION MATRIX FOR FACILITATE-WHAT

Primary Observer		Reliability Observer											
		O	LI	FS	FE	DP	MD	GM	WK	PN	ET	NT	PS
No Code	O	2,636	34	35	41	10	8	11	11	37	0	6	19
Language/information	LI	38	241	20	10	8	1	1	2	2	0	0	2
Structured fine motor	FS	33	10	265	46	8	0	3	3	1	0	0	7
Exploratory fine motor	FE	38	6	51	114	4	0	0	1	0	0	0	2
Dramatic play	DP	15	9	2	2	32	1	2	0	1	0	0	1
Music/dance	MD	6	3	1	0	0	38	0	0	0	0	0	0
Gross motor	GM	12	0	4	1	1	1	47	0	0	0	0	1
Work	WK	12	0	1	7	0	0	2	28	0	0	0	1
Phyiscal needs	PN	46	1	1	1	0	1	0	3	256	1	0	1
Educational TV	ET	1	0	0	0	0	0	0	0	0	0	0	0
Noneducational TV	NT	2	0	0	0	0	0	0	0	0	0	4	0
Prosocial	PS	19	2	4	2	0	0	1	1	2	0	0	36

cleaning up paint to playing in the paint) whereas others did not. Given this confusion and the low frequency of the work code, we believed that subsuming work under exploratory fine motor might be appropriate, but in the end the two codes were left intact.

The frequency of the prosocial (PS) activity code was also low. Still, one of the interests of the NDCHS is the extent to which caregivers socialize children, so retaining the PS code was important. Accordingly, PS was moved to the top of the hierarchy of activity codes so that it could be recorded more frequently.

Educational and noneducational television (ET and NT) were rarely coded on the ABC (the matrix shows only one recording of ET and four of NT); however, both television activities were recorded frequently on SNAP. This indicated that the ABC's restrictive procedures for using the two codes caused them to be recorded so rarely. Therefore, the rules for using ET and NT in the Phase II version of the ABC were modified.

Facilitate-Child Response--Even while training was under way, we realized that observers did not reliably code the Facilitate-Child Response dimension. Trained as they were to observe the finest distinctions in caregiver behaviors, observers found it difficult to switch their attention to the children, even for the moment it takes to observe a response. In the paired observations in the field, the rate of agreement was low on all the child response codes; and, as Table 13 shows, serious confusion exists even between such disparate responses as active (AC) and passive (PS). Consequently, the child response was dropped from the ABC. Child information was collected in Phase II on a CC. For this new instrument, a format similar to the ABC was adopted. (The CC is described later in this chapter.)

Restrict-How--The low frequency of codes recorded in the Restrict-How dimension of the ABC pointed up the narrowness of the definition of restrictive behavior used in Phase I. In an effort to improve observers' reliability in identifying examples of restrictions, we instructed observers to use it only when the caregiver told children *not* to do something. Many behaviors that could be considered restrictive were worded differently (for example, "Stay away from there!"); thus, the narrow

Table 13

CONFUSION MATRIX FOR THE FACILITATE-CHILD-RESPONSE DIMENSION

Primary Observer		Reliability Observer O	AC	PS	IA	MX
No code	O	2,657	153	74	3	30
Active	AC	138	396	201	5	27
Passive	PS	92	225	300	7	43
Inattentive	IA	7	5	2	7	2
Mixed	MX	32	50	43	4	85

definition of the ABC's restrict code ensured a limited number of occurrences. Unfortunately, it also created additional problems in deciding when to code and when not to code. In fact, examination of Table 14 shows that the confusion that observers experienced was not so much between retrict (R) and harsh restrict (HR) as it was between coding and not coding in this dimension.

Table 14

CONFUSION MATRIX FOR THE RESTRICT-HOW DIMENSION

Primary Observer		Reliability Observer O	R	HR
No code	O	4,404	59	4
Restrict	R	45	69	2
Harsh restrict	HR	1	0	4

Between Phases I and II, the observation staff tested broader definitions of the restrict code but could not achieve acceptable reliability. In the Phase II and Phase III instruments, accordingly, the code definition remained the same as it was in Phase I.

Restrict-What--Because of the low occurrence of restrictive behavior coded in the Restrict-How column, a correspondingly low frequency of activities was coded in the Restrict-What dimension (Table 15). We

Table 15

CONFUSION MATRIX FOR THE RESTRICT-WHAT DIMENSION

Primary Observer		Reliability Observer					
		O	DG	AS	WL	AV	RQ
No code	O	4,404	4	10	2	37	9
Danger	DG	1	1	0	0	0	0
Antisocial	AS	4	0	10	0	6	0
Wild	WL	0	0	0	2	1	0
Activity	AV	41	1	5	1	44	0
Request	RQ	0	0	0	0	0	3

believed that even the proposed broader definition of restrictive behavior would probably not support so many and such fine distinctions between activities as appeared in the Restrict-What dimension. Therefore, we combined those codes that describe similar behaviors, such as antisocial (AS) and wild (WL), and activity (AV) and request (RQ). Danger (DG) was retained in the same form because it describes a study variable that should remain discrete.

Restrict-Explain--Like the Restrict-What codes, the two Restrict-Explain codes (Yes, No) reflected observers' confusion about whether to code in the Restrict section at all (see Table 16). The problems evidenced in this dimension were resolved by clarifying the definition of restrictive behavior.

Other--The five categories of caregiver behaviors or activities in the Other dimension are affection (AF), comfort (CM), conversation (CV), supervise (SV), and nonchild activities (NC) such as housekeeping.

Although observers showed some confusion in coding caregivers' affection-giving and comfort-giving behaviors, Table 17 indicates that the disagreement was not so much in making a distinction between the codes as it was in making the decision to code or not to code in this dimension. In

Table 16

CONFUSION MATRIX FOR
THE RESTRICT-EXPLAIN DIMENSION

Primary Observer		Reliability Observer 0	 Yes	 No
No code	0	4,405	22	43
Explanation	Yes	14	14	6
No explanation	No	33	6	45

Table 17

CONFUSION MATRIX FOR THE OTHER DIMENSION

Primary Observer		Reliability Observer 0	 AF	 CM	 CV	 SV	 NC
No code	0	1,885	16	7	114	78	42
Affection	AF	14	51	1	6	3	0
Comfort	CM	7	3	18	4	0	0
Conversation	CV	120	5	0	422	47	29
Supervise	SV	71	9	2	38	554	47
Nonchild	NC	71	1	1	24	44	854

a debriefing session held after the data collection was completed, observers reported their distress about being restrained by the ABC's system of priorities from coding the affective behaviors of caregivers. In response to these comments, we reorganized the ABC to include affection and comfort with prosocial as the first column of codes in the Facilitate-What dimension. In this way, observers were able to code affection-giving and comfort-giving behaviors whenever they occurred.

A narrower definition of the nonchild (NC) code was constructed for Phase II. In its previous form, NC encompassed both preparations for children and simple housekeeping tasks. In Phase II, both activities were included in a redesigned dimension comprising four codes: supervise (SV); the two major components of the Phase I NC code, preparations for children (PC) and housekeeping tasks (HS); and a new code to represent caregiver relaxation activities (RA). Conversation (CV), the remaining code in the Phase I Other dimension, was then moved to the Facilitate-What column as an appropriate addition to that dimension.

Changes in Carew/SRI SNAP for Phase II

On the basis of information obtained in Phase I, SNAP was reformatted to make the child instrument visually more similar to the ABC. The new format included all the information collected on SNAP as well as a child Emotion column. In making this change, we believed that observers would find it easier to use two instruments of similar design and that analyses of the instruments would be easier to specify and conduct. In Phases II and III, the reformatted child instrument was called the CC (Child Codes).

Testing of Revised Phase II Adult and Child Observation Instruments

The revised instruments were field tested in Black, Hispanic, and White day care homes by observers representing each ethnic group. Final revisions to the instruments were made in the late summer. New training videotapes of Hispanic caregivers were made in local day care homes, the instruments were formatted for optical scanning, and observation booklets and training manuals were printed.

The revised procedures, codes, and format for the Phase II adult and child observation instruments are discussed in the following sections.

The Recording System

In coding the Phase I ABC, the observer focused on the caregiver's behavior for 3 seconds and coded her behavior during the next 27 seconds, with a complete observe/code sequence occurring every 30 seconds. For Phase II, the interval was shortened to 20 seconds, with a 3-second observation interval and a 17-second coding interval. Observation intervals were signaled by an electronic device with an earplug that was used by the observer. The observer coded the caregiver's behavior for 5 minutes and then recorded an individual child's behavior on the CC for 5 minutes. Three ABC sections were alternated with three CC sections in each observation booklet. Three entire booklets were completed in natural situations each morning; only relevant sections of a booklet were recorded in structured situation observations (two ABCs and two CCs were completed in the Play Village situation; two ABCs were completed in the Play-Doh Factory situation).

ABC Coding Procedures

In general, the ABC recording system and coding procedures were unchanged from those used in Phase I. As described, the revisions made to the ABC for Phase II consisted mainly of combining some codes and rearranging or redefining others as described earlier.

Table 18 is a sample ABC frame (as revised) in Phase II; the table lists the codes for each dimension. Because the conceptual framework of the Phase I ABC remained unchanged, only a brief description of each ABC dimension, as redesigned for Phase II, follows.

The Who dimension identifies the target of the observations. The observer always codes the behavior of the caregiver who has primary responsibility for the children (MI), unless she has left the children in the care of another person (OP) who might be another regular caregiver, an adult, or an older child.

The Whom dimension codes the identity of the person or persons with whom the caregiver interacts. Two children are selected beforehand as target children, C1 and C2, representing two different age groups between 1 and 5 years (C1 represents target children of 12 to 35 months; C2

Table 18

PHASE II ABC CODING FRAME

Who	Auxiliary	Whom		FACILITATE				CONTROL			Emot.	Lang.
				How	What			How	What	Explain		
[illegible]	CV	C1	OC	TE	PE	LI	MO	CR	DS	YES	+	EN
[illegible]		C2	GP	PP	AF	FS	GM	SC	AE	NO	-	SP
[illegible]	[illegible]	BA	AD	NP	CM	DP	PR		AV		NU	BO
	PC	YC		DR		FE	ET					NO
	[illegible]					TK	RT					
C	RA						RA					

represents target children of 36 to 59 months).* The code C1 or C2 is used when the caregiver interacts individually with either of these target children. Other codes are used when the caregiver interacts with any other child less than 1 year old (baby--BA), with any other child age 1 to 5 years old (young child--YC), with any child over 5 (older child--OC), with a teenager or an adult (AD), or with a group of two or more children (GP).

The Emotion dimension codes the affect expressed by the caregiver as positive (+), negative (-), or neutral (NU). The positive and negative codes are defined to pick up clear evidence of affect; mild displays of affect are coded as neutral.

The Language dimension codes whether the caregiver spoke English (EN), Spanish (SP), or both languages (BO) during the observation unit or that she used no words (NO).

These four dimensions were always coded unless the caregiver was out of range (OR) or not directly interacting with children.

The remaining six dimensions of the ABC were grouped under three headings that refer to the type of technique the caregiver used in interacting with the child: facilitate, control, and auxiliary (conversation--CV--only).

---

* Subsequently in this report, target children C1 and C2 are referred to as Focus Child 1 and Focus Child 2, respectively.

The observer first decided whether the caregiver's technique was facilitative, controlling, or social conversation. When the caregiver used a facilitative technique, the observer coded the particular technique in the How column under Facilitate and the activity that the caregiver was facilitating in the What column. Similarly, if the caregiver used a control technique, the observer coded the particular technique in the How column under Control, the child's activity that was being restricted in the What column, and whether the caregiver offered an explanation to the child in the Explain column. Conversation (CV), which was not included under Facilitate or Control, was coded in the Auxiliary column.

The Facilitate-How column of the Phase II ABC includes four strategies that caregivers commonly use to promote, guide or participate in activities with children and to foster their learning of skills and concepts. They are teaching (TE), playing/participating (PP), helping (HP), and directing (DR).

The Phase II Facilitate-What columns represent 14 categories of activity: fostering of prosocial behavior (PS), the giving of affection (AF) or comfort (CM), teaching of language and conveying of nonroutine information (LI), activities requiring complex eye-hand coordination and nonverbal reasoning (FS), dramatic play (DP), exploratory play using the small muscles (FE), household chores (WK), music and dancing (MD), gross motor play (GM), physical care of the body (PN), watching educational television programs (ET), watching noneducational TV programs (NT), and no activity (NA).

In the Control-How column of the Phase II adult instrument, the observer codes the intensity of the caregiver's control behavior as simply controlling (CN) or particularly strict (SC).

In the Control-What column, the observer codes the type of activity that the caregiver controls, including dangerous behavior (DG), antisocial behavior (AS), and other activities (AV).

In the Control-Explain column, the observer codes whether the caregiver offers any reasonable explanation to the child for her restriction.

In the Auxiliary column, the observer codes those caregiver behaviors that have not been included under the Facilitate or Control headings. The first category, social conversation (CV), describes caregiver behavior that is positive and has socioemotional intent. The remaining four categories, supervision (SV), preparations for children (PC), housekeeping tasks (HS), and caregiver's own recreational or relaxation activities (RA), describe behaviors that are frequently observed but involve no direct interaction with the child.

The relationships of the variables developed from these codes to the categories of caregiver behavior described in Chapter III is shown in Table 2.

CC Coding Procedures

The CC instrument developed for Phase II (to replace the Phase I SNAP) was used alternately with the ABC in the natural situation and in the Play Village structured situation. In the CC, the observer recorded an individual focus child's behaviors and activities at 20-second observe-code intervals for a 5-minute period. When Focus Child 1 and Focus Child 2 were in the home, the observer recorded the behavior of one child for the first 5-minute CC and the other child for the second 5-minute CC; she continued that pattern throughout the observation day. If only one focus child was in the home, all CCs were completed on that child.

Because they were used alternately by the same observer in the same situations in a home, the CC and ABC were as similar as possible in code definitions and format. A sample CC frame is shown in Table 19 listing the codes in each dimension. A brief description of each of the seven CC dimensions follows. (See Appendix B for definitions.)

In the Who dimension, the observer codes the child who is the focus of the observation (FC) unless he or she has gone out of the room and following him or her is not possible (OR).

The Activity dimension records the activity in which the focus child is engaged. The activities are identical to those included in the

Table 19

PHASE II CC CODING FRAME

Who	Activity			Auxiliary	Whom		Mode	Emot.	Lang.
[illegible]	[illegible]	[illegible]	[illegible]	CV	[illegible]	[illegible]	AC	+	EN
[illegible]	[illegible]	[illegible]	[illegible]	TR	[illegible]	[illegible]	RV	−	SP
	DS	[illegible]	[illegible]		[illegible]	[illegible]		NU	[illegible]
	AT	[illegible]	[illegible]	OB	YC				[illegible]
	AS	[illegible]	[illegible]	BL					
C	CN		[illegible]						

Facilitate-What dimension of the ABC except for the four codes in the first column (DS--distress, AT--attention-seeking, AS--antisocial, and CN--control). These four codes describe behaviors or activities in which children are frequently observed.

Two categories of codes are included in the Auxiliary dimension, separated on the form by a horizontal line (see Table 19). Comments initiated or received by the child are recorded above the line as conversational (CV) or task-related (TR). A focus child who is simply observing others is coded below the line as OB; one who is "tuned out" or wandering aimlessly is coded below the line as BL. If the OB or BL codes are used, the observer need code no further in the frame.

In the Whom dimension, the observer codes the person with whom the focus child is interacting (self, the main caregiver, a baby, another child age 1 to 5 years, an older child, a group of two or more children, or a teenager or an adult other than the main caregiver).

The Mode dimension records the child as engaged in his or her activity or as initiating comments (AC) or as receiving others' actions or comments (RV). A child who is responding verbally to another can also be recorded here (RV with language coded in the Language dimension).

In the Emotion dimension, the focus child's affect, as displayed during the 3-second observation unit, is coded as positive (+), negative (-), or neutral (NU). (See Appendix B for definitions.)

The Language dimension records whether the focus child used English (EN), Spanish (SP), both languages (BO), or no language (NO) during the observation unit.

The relationships of the variables developed from these codes to the categories of child behavior discussed in Chapter III are shown in Table 3.

Information Sheet--Phase II

Additional information about the children and caregiver in each home was collected on the last page of one of the Phase II Carew-SRI Observation System booklets. The presence of bilingual/bicultural materials was observed and recorded in the home, and the final question ("What do you think is the most important thing you do for the children?") was asked and the response recorded while the observer was in the home. All other information on the Information Sheet was collected by the research contractor and transferred to the booklet by the data supervisors after the observations were completed.

The purpose of the Information Sheet is to record on the observation booklets themselves certain child, caregiver, and home characteristics. These data are needed to complete the analysis of relationships that may exist between observed behaviors and variables such as caregiver's experience in day care.

Book Tally--Phase II

The Book Tally was used to code the caregiver's behavior in the structured book situation. This instrument remained the same from Phase I to Phase II.

Daily Log--Phase II

The Daily Log that observers used each day to describe anomalies and the quality of the data remained the same from Phase I to Phase II.

Phase III Refinements

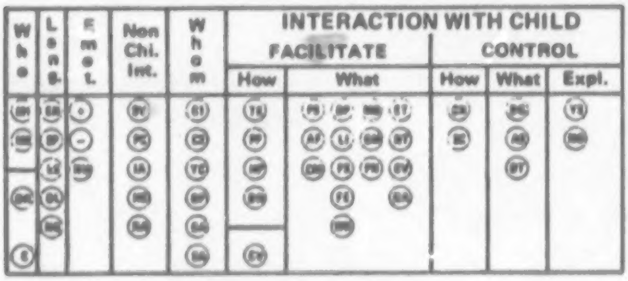
The pilot test conducted in the San Francisco Bay Area during Phase I enabled us to examine instruments carefully and to make changes for the comprehensive pilot test during Phase II. Because of the careful development in Phases I and II, modifications required for the Phase III instruments were minimal. The Book Tally and Daily Log were not modified at all. The refinements made to the adult-focus and child-focus instruments of the Carew/SRI Observation System are discussed below.

Carew/SRI Adult Behavior Codes (ABC)--Phase III

Table 20 is a sample ABC coding frame for Phase III. The dimensions are Who, Language, Whom, Facilitate-How, and so on. The symbols within each dimension refer to the codes.

Table 20

PHASE III ABC CODING FRAME


Who
Lang.
Emot.
Non Chi. Int.
Whom
INTERACTION WITH CHILD
FACILITATE
CONTROL
How
What
How
What
Expl.

The dimensions of the Phase II instrument were reordered for Phase III, and the Auxiliary column was renamed "Nonchild Interactive." The columns were reordered to allow observers to record the language used and the emotion expressed at the beginning of the frame. A few observers tended to omit these recordings when they came at the end of the frame. The Auxiliary column was changed to Nonchild Interactive because that label seemed more appropriate to the activities it reflects: supervision, preparations for children, interaction with adult, housekeeping, and caregiver's own recreational activity.

The Phase II code GP (other person) in the Who dimension was renamed M2, but the code definition remained the same--secondary caregiver or other person who has the responsibility of caring for children in the primary caregiver's absence.

Two minor changes were made in the Language dimension: ES (English-Spanish) replaced the Phase II code BO (both English and Spanish); the code OL (other language) was added to give the observer a place to code languages other than Spanish and English.

The Phase III Whom dimension does not include the code AD (Adult) used in Phase II. All interactions with adults are recorded as IA (interaction with adult). Although the definitions remain the same, the Phase III instrument uses the code SA, rather than OC (older child), to refer to school-age children.

The Phase III Nonchild Interactive dimension includes the code IA (interaction with adult), replacing the Phase II code CV (conversation) in the Auxiliary column. The CV code was used in Phase II for conversations with both adults and children; the Phase III code, IA, is used for conversations with adults only.

In the Phase III ABC, conversation with children is coded in the Facilitate-How dimension, a more logical placement for the code because it falls under the Interaction with Child section of the instrument. The Facilitate-What dimension also includes a CV code to be used when the only activity engaged in is conversation with a child.

Finally, another code name was changed: the Phase III Control-What dimension lists the code OT (other activity) rather than the Phase II symbol AV (other activity). The definition remains the same.

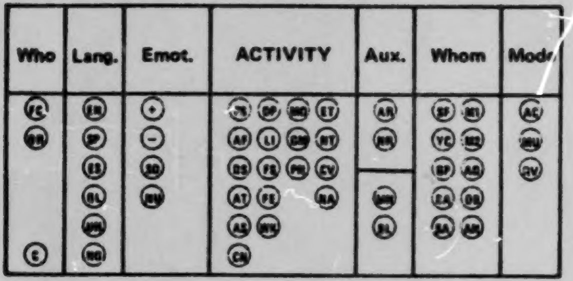
Detailed definitions and examples of the Phase III ABC codes are given in Appendix B.

Carew/SRI Child Codes (CC)--Phase III

The columns of the Phase III child codes instrument were reordered as they were in the ABC frame, for the ease of the observer. Table 21 shows Phase III CC coding frames.

Table 21

PHASE III CC CODING FRAMES



Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Modr
FC OR C	EN SP ES OL UN NG	+ − SD [illegible]	TS DP [illegible] ET AF LI [illegible] RT DS FE [illegible] CV AT FE RA AS WK CN	AR NR MN [illegible]	SF M1 YC M2 BP AG EA OB SA AN	AC [illegible] [illegible]

Several CC codes were added or amended as a result of the analysis of data collected in the Los Angeles study. In the Language dimension, ES for English-Spanish was used rather than the code BO (both English and Spanish), code OL (other language) was added, and code UN (unintelligible) was added to describe children's babbling that the observer cannot distinguish as English or Spanish.

The code SD (sad) was added to the Emotion dimension to describe sadness or crying because Phase II observers found it difficult at times to code such behavior as negative.

Code CV (conversation) was added to the activity dimension and is coded when a child is engaged in conversation and no other activity.

In the Phase III Auxiliary dimension, code NR replaces the code CV for nontask-related comment and code AR (activity-related comment) replaces the Phase II code TR (task-related comment). The Phase III instrument also lists code MN (monitor) rather than the Phase II code OB (observes). The definitions remain the same.

Code M2 (secondary caregiver), code OB (observer), and code AN (animal) were added to the Whom dimension, again at the request of Phase II observers. The OB code enables us to determine how often the children's attention is directed to the observer. Also in the Whom dimension, the Phase III instrument lists code SA (school-age child) rather than the Phase II code OC (older child). The definition remains the same.

A new code, MU (mutual) to describe children's mutual participation in activities (that is, interactions that are equal or cooperative efforts), was added to the Mode dimension.

Structured Situations--Phase III

Two structured situations, the Book and Play-Doh Factory, were used in Phase III. The Play Village used in Phase II was dropped from the battery because the results of the Phase II study suggested that data from the village were less likely to show intergroup differences than those from the more explicit factory and book situations.

Daily Log--Phase III

Observers completed the Daily Log at the end of each morning during Phases I, II, and III. The form of the log did not change. It recorded information about interruptions to the schedule, unusual happenings, invalid or incomplete data, caregiver affect, observer reactions, and the type of dwelling where the caregiving occurs.

Additional Measures--Phase III

Two checklists and an observational summary were developed for Phase III to provide further descriptions of the home. Specifically, the Nutrition Checklist provides information about the number of meals and snacks and the types of food prepared or served to children. The Physical Environment Checklist contains 29 statements describing health and safety features, materials, and space of the home.

The Nutrition Checklist and Physical Environment Checklist were completed by observers before they left the home. The Observation Summary, which was completed by the observer after leaving the home, described the overall climate, or atmosphere, of the home as determined by the observer's impression of certain caregiver and child behaviors. The checklists and observation summary were included on the last several pages of the first observation booklet used by the observers each morning. Checklist and summary items are defined in Appendix B.

V DESIGN AND DESCRIPTION OF THE SAMPLE

The instruments described in Chapter IV were used to collect observations on a large sample of day care homes that constitute the analysis sample for this study. In all, 303 homes were observed.* In Phase II and Phase III, homes in three different geographical areas were studied. This chapter presents the rationale for selection of the design for the observation study and describes the implementation of that design in the sample.

Types of Care and Ethnic Groups

Sample design and selection were the responsibilities of Abt Associates, Inc., the research contractor for the study of home day care.

In executing these tasks, the two main objectives of this study were considered: (1) to develop profiles of the various types of family day care and (2) to explore the differences among these types.

To meet these objectives, identifying the types of care to be studied was first necessary. Because sponsored, licensed/registered, and unlicensed/unregulated homes are the major forms of family day care, we decided to incorporate each of these types into the study design.

Furthermore, a 25-city survey of family day care conducted in Phase I showed that 99% of all family day care in this country is provided by non-Hispanic White,† non-Hispanic Black,† and Hispanic caregivers, with Whites accounting for 72% of all caregivers, Blacks for 20% and Hispanics for 7%. The study efforts were thus restricted to these three population groups.

---

*This is a subsample of Abt Associates' total sample of 793 homes (see Volume II of the NDCHS Final Report).

†For brevity, non-Hispanic White and non-Hispanic Black caregivers are referred to as White and Black caregivers

Nine groups of caregivers were identified to represent each of the three home types and each of the three population groups. Thus, the study was designed to cover regulated White, Black, and Hispanic caregivers; unregulated White, Black, and Hispanic caregivers; and sponsored White, Black, and Hispanic caregivers.

Site Selection

The Phase I survey of family day care showed that unless a substantial amount of time was expended searching for caregivers within a given site, the representativeness of the site sample was suspect. Given the study's limited resources, the intensive site effort needed clearly could be undertaken in only a few, ultimate three, sites. This number was deemed large enough to represent the variation in care from city to city and it was small enough that study resources could be narrowly focused and produce a sufficient number of family day care homes in each selected site for the conduct of subsequent analyses.

Site selection began with careful evaluation of the demographic characteristics of the populations of all 248 urbanized areas in the United States. The point of these analyses was to examine how sites could be categorized according to measures likely to be related to the kinds of family day care to be found in those sites. Measures of socioeconomic status--wealth, occupational status (blue collar/white collar), and education--were emphasized because the day care of principal interest to the study is work-related care, and we assumed that socioeconomic conditions within a site would be associated with different day care configurations.

The analysis indicated that three types of urbanized areas exist for purposes of the study and that the group to which an urbanized area belongs depends on the geographical region (North, South, or West) where the site is. Northern cities tend to be industrial and blue collar, western cities are more white collar and wealthier, and southern cities have less manufacturing and are poorer but span a greater range of day care home types. To reflect possible differences in family day care, it was important that the study sites ultimately selected represent each major city type. Because each of the three regional clusters of urbanized areas had to be represented by at least one site, three sites were drawn.

During Phase I, a series of preliminary surveys was undertaken to help identify candidate sites. First a brief survey was conducted in each of 25 randomly selected cities. This was followed by a more extensive survey in 10 cities chosen from among the 25. Examination of the survey data, in conjunction with the previous statistical analyses of all 248 urbanized areas, enabled us to restrict subsequent site selection to six candidate sites, with two sites in each of the three regions--Minneapolis and Philadelphia in the North, Dallas and San Antonio in the South, and Los Angeles and Seattle in the West.

We made additional site visits to each of these candidate cities to examine the configuration of family day care. The objective was to reduce the number of study sites to three by choosing only one from each region. Los Angeles, Philadelphia, and San Antonio were selected because they met all the study's site criteria.

First, they represent each of the three major geographic regions of the country and so represent the range of communities that use family day care. The sites represent not only a range of environmental characteristics such as climate but also such other potentially significant physical characteristics as the mix of single family and multiple-unit dwellings. (An a priori assumption was that these differences might have an impact on the provision of day care in a site. For example, Los Angeles is warmer for most of the year and so children have more time to be outdoors. Also, more caregivers in Los Angeles than in Philadelphia live in single-family dwellings, and they tend to have more space for the children to play and easier access to the outdoors.)

Second, because the regulatory practices within a site were deemed likely to affect the configuration of day care, an essential factor was that the selected sites represent a variety of such practices. The three sites were selected because they represented both the new registration system in place in Texas and the more traditional licensing structures used in other sites.

The three candidate sites were also selected because each was socioculturally heterogeneous. For this study to have validity as a national study, the range of groups needing day care and using family care had to be represented. Achievement of such validity (along with minimizing the number of study sites to conserve study resources) required that each selected site represent a range of population groups. As previously indicated, the three ethnic groups that constitute the majority of the consumers of family day care are Whites, Blacks, and Hispanics. These groups are amply represented in our sample.

Another selection criterion was that each candidate site contain all three types of family day care--sponsored, licensed or registered, and unlicensed or unregulated. This requirement allows for within-site comparisons among the three home types. In particular, selecting homes of the three types from each study neighborhood within each site was important, so that differences between types could be attributed to home type rather than be obscured by such factors as ethnic and site differences. The major difficulty in implementing this criterion was that whereas many sites have ample numbers of regulated and unregulated homes, sponsored homes are relatively rare.

Finally, the study sites were selected because each had a substantial number of subsidized day care children. Because subsidized day care is one of the areas of principal federal policy impact, an adequate number of homes serving this population was to be included in the study sample.

Since design decisions described thus far were based on the first study objective--to produce profiles of the several types of family day care homes. The second objective--to compare and contrast these types--required that enough homes of each type be studied to uncover differences between types, if there were such differences. A statistical power analysis showed that 16 homes of each type were desirable for the observation study.

The design for the observation study is shown in Table 22. The boxed numbers indicate the numbers of homes originally specified, which were to

103

be selected from Abt Associates' total sample of 793 homes.* Since a registration system was in operation in San Antonio, registered and unregistered homes were used rather than licensed (regulated) and unlicensed (unregulated) as in the other two sites. In Philadelphia, there were too few Hispanic caregivers similar in ethnic background to those in Los Angeles to be included. Finally, there were no White caregivers in sponsored homes in San Antonio.

The other numbers in Table 22 and the totals indicate the numbers of homes actually observed. The distribution of homes observed depended on the number and type of homes identified by the research contractor and the cooperation of the caregivers. The greatest discrepancy between intended and actual numbers of homes observed was for Los Angeles unregulated day care homes. Unregulated homes were simply more difficult to locate than sponsored or regulated homes. In Phase III, we profited by our experience in Phase II in that early and greater attention was given to the recruiting of unregulated homes.

The frequencies in Table 22 describe the observation sample for each of the three design variables used in recruiting homes. As explained in Chapter IV, the observation instruments focused on children 12 months through 59 months old. Thus, each home where observations were conducted was required to have at least one child in that age range. The child was to be present and awake for at least 2 hours during the child observation period, and parental permission for participation in the study was mandatory. Although this was not a requirement for selection in the observation sample, we made every effort to select homes where at least one child was in the age range of 12 to 35 months (Focus Child 1) and at least one child was in the age range of 36 to 59 months (Focus Child 2). This was to accommodate the child observation instrumentation as described in Chapter IV. In addition, the children selected for the focus of observation were preferably not related to the caregiver, although this was not a strict requirement. The selection of focus children and the daily observation schedules are described in greater detail in Chapter VI.

---

* See Volume II, National Day Care Home Study Final Report.

Table 22

NATIONAL DAY CARE HOME STUDY DESIGN

Site	Sponsored Homes	Regulated Homes	Unregulated Homes	Total
Los Angeles (Phase II)				
White	$\boxed{16}$ 14	$\boxed{16}$ 15	$\boxed{16}$ 13	42
Black	$\boxed{16}$ 11	$\boxed{16}$ 13	$\boxed{16}$ 2	26
Hispanic	$\boxed{16}$ 16	$\boxed{16}$ 7	$\boxed{16}$ 8	31
Total	41	35	23	99
San Antonio (Phase III)				
White	$\boxed{*}$	$\boxed{16}$ 24	$\boxed{16}$ 19	43
Black	$\boxed{16}$ 5	$\boxed{16}$ 7	$\boxed{16}$ 14	26
Hispanic	$\boxed{16}$ 11	$\boxed{16}$ 18	$\boxed{16}$ 17	46
Total	16	49	50	115
Philadelphia (Phase III)				
White	$\boxed{16}$ 15	$\boxed{16}$ 12	$\boxed{16}$ 14	41
Black	$\boxed{16}$ 18	$\boxed{16}$ 17	$\boxed{16}$ 13	48
Total	33	29	27	89

Note: Boxed numbers indicate the number of homes originally specified; unboxed numbers indicate the number of homes actually observed.

*There were no white sponsored homes in San Antonio.

The study design was implemented initially only in Los Angeles for a full-scale pilot test (Phase II). The primary reason for organizing the study in this manner was to determine whether the range of research instruments and complex field operations developed during Phase I were appropriate and feasible in actual community settings. Principal questions centered on the ability to identify caregivers, to enlist and maintain their cooperation in the study, to obtain various types of information, and to coordinate the activities required of three research teams on site.

The success of the Los Angeles pilot demonstrated the ability of the study instruments and operational procedures to meet research objectives and increased our confidence in our ability to extend the study to additional sites successfully. As a result of the Phase II pilot effort, data collection instruments and field procedures required only minor additional refinements before implementation in San Antonio and Philadelphia. Thus, the Los Angeles data base could be used in conjunction with the data collected in the other two sites to compose the three-site study design (Table 22).

Home Sample Observed

In addition to the three design variables and the requirements for child observation that were used in the selection of homes, the observation sample can be described on several other dimensions that were used as independent variables in subsequent analyses.

Based on previous research and common sense, we hypothesized that the number of children in a home and the ages of those children would be related to the types of caregiver and child behaviors observed. Thus, four independent variables represented the number of infants in a home (under 12 months of age), the number of children between 12 and 35 months old in a home (Focus Child 1), the number of children between 36 and 59 months old in a home (Focus Child 2), and the number of school-age children in a home (60 months or older). Whereas collectively these four independent variables describe the distribution of children in a home according to age, two additional independent variables were defined to facilitate ease of interpretation: (1) the average age of children in a home who were 12 months or older and (2) the standard deviation of children's ages (12 months or older) within a home--an attempt to represent the diversity of ages with which the caregiver was confronted. Other independent variables used to describe the child composition of a home were the percentage of females, percentage of Blacks, percentage of Whites, and percentage of Hispanics.

Several characteristics of caregivers were also expected to predict the types of behaviors observed. The caregiver's years of experience and years of education were two independent variables. A third caregiver characteristic of interest was age (in years).

Finally, a home was described by the relationship, if any, between the caregiver and one or more of the children present during observation. One independent variable indicated whether or not one or more of the caregiver's own children were present. The other independent variable represented the presence or not of one or more children related to, but not a child of, the caregiver.

Chapter VIII describes the observation sample in terms of caregivers' and children's behaviors and analyzes the relationship among these behaviors and the independent variables of the study. As a context for those analyses, the observation sample is described here in terms of the independent variables and their interrelationships. Because the analyses reported in Chapter VIII are not always based on the same sample, describing any differences that may exist among analysis samples is also important.

As indicated in Chapter IV, caregivers were observed during natural situations and structured situations. Because not all caregivers agreed to participate in the structured situations, analyses of those data represent a subsample of 303 homes in the study. Further, not every home had both a Focus Child 1 and Focus Child 2 present. Analyses in which distinctions were made as to which focus child was being observed or as to which focus child was interacting with the caregiver are, therefore, also based on subsamples.

Table 23 summarizes the various sample sizes for which the several types of observation data were available. The row labeled "All Children" indicates those interactions where no distinction was made between Focus Child 1 and Focus Child 2. The smallest sample was for structured situations when the

Table 23

NUMBER OF HOMES ON WHICH OBSERVATION DATA WERE AVAILABLE

Caregiver Interaction	ABC		CC
	Natural	Structured	
with Focus Child 1	247	172	247
with Focus Child 2	158	119	158
with all children	296	210	

caregiver was interacting with Focus Child 2 (i.e., 119 homes). The largest sample was for the total interactions in the natural situation.

Despite the marked difference in sample size between structured and natural observations and between Focus Child 1 data and Focus Child 2 data, the subsamples of homes were similar in terms of the design variables and the other independent variables (see Table C-1 in Appendix C). Thus, in subsequent analyses, if differences are found between caregiver behaviors in natural situations as opposed to structured situations, these cannot be readily attributed to differences in the composition of the sample on which those two sets of analyses were based. Similarly, differences in observation data between Focus Child 1 and Focus Child 2 cannot be attributed to differences in the types of homes on which those two sets of analyses were based. Because the several subsamples on which analyses were based were similar, the observation sample is described in terms of all homes for which observations in natural situations were available (the largest sample). This has already been done for the three design variables and their interrelationships (Table 22).

Figure 1 presents the distribution of homes in the sample according to the average number of children present in each of the four age categories. As expected, given the selection criteria for including homes in the observation sample, the greatest number of children present were between 12 and 59 months old. However, substantially more children were in the age range 12 to 35 months (average of 1.88 children per home) than in the age range 36 to 59 months (average of 1.14 children per home). The number of infants in the sample was about equal to the number of school-age children (averages of .38 and .34 per home, respectively). Excluding infants, the average age of children in the homes was 34 months, and the average standard deviation of ages in a home was 12.13 months. Thus, the average home in theh sample had children with a mean age of just under 3 years and a range of ages of approximately 4 years (plus or minus two standard deviations).

For most homes in the sample, the ethnicity of the children was the same as that of the caregiver. The sample of homes had 42% White caregivers, 33% Black caregivers, and 25% Hispanic caregivers. The correlation between the ethnicity of the caregiver and percentage of children in the home of the same ethnicity was approximately .9 for White, Black, and Hispanic. The average percentage of female children in a home was 0.48.

Figure 2 describes the observation sample on the independent variables of caregivers' age, experience, and education. As indicated, the average age of caregivers was 43 years, the average number of years of education was 11.33 years (just under the typical number of years necessary to graduate from high school), and the average number of years of experience in providing home day care was 7.13. The age of caregivers in the sample varied substantially (standard deviation of 13.42 years), as did years of experience (standard deviation of 6.87 years, which indicates a strong positive skew to the distribution of experience). In contrast, the sample was homogeneous on the variable of number of years of education (standard deviation of 2.4 years). Because the average number of years of education was less than 12, a large percentage of caregivers in the sample had not completed their high school education.

In many of the homes in the sample, one or more children were related to the caregiver. In 39% of the homes, one or more of the children were the caregiver's. In 20% of the homes, one or more of the children were related to the caregiver but were not her own children. Because there was a slight negative correlation between these two variables (-.12), in slightly more than 60% of the homes in the observation sample were one or more children in care related to the caregiver.

In addition to describing the sample of homes in terms of means on the independent variables, it is also useful to consider the intercorrelations

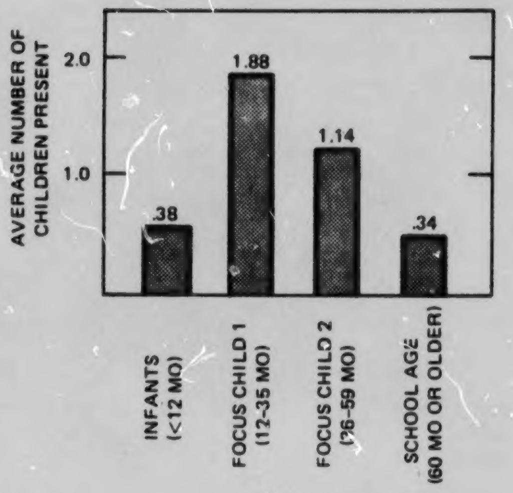


FIGURE 1 DISTRIBUTION OF DAY-CARE HOMES ACCORDING TO AVERAGE NUMBER OF CHILDREN IN THE FOUR AGE CATEGORIES

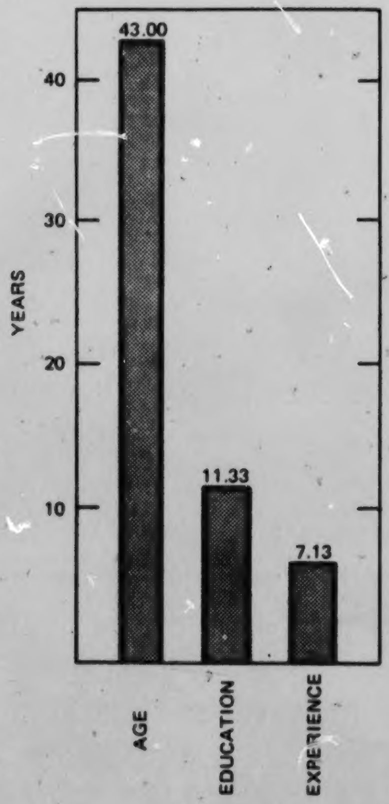


FIGURE 2 CHARACTERIZATION OF CAREGIVERS RELATIVE TO AGE, EDUCATION, AND EXPERIENCE

among these independent variables. To the extent that two independent variables are highly correlated, it will be difficult in the latter analyses to separate their effects in predicting caregivers' and children's behaviors.

Table 24 presents the intercorrelations among the independent variables based on the total sample of homes for which observation data were available. The first six rows (and columns) of Table 24 represent the three design variables. Because each of the design variables was nominal scale and had three categories, it was necessary to represent each by a pair of dichotomous variables. The variable in the first row contrasts San Antonio with the other two sites (i.e., homes in San Antonio were coded 1 and all other homes were coded 0). The variable in the second row contrasts Philadelphia with the other two sites. A third variable contrasting Los Angeles with the other two sites would be redundant, because any home receiving a 0 on the first two variables must be a Los Angeles home. The other two pairs of variables were formed in a similar manner to define the status and caregiver ethnicity design variables. The only other variables in Table 24 that require special explanations are "Child is caregiver's child" and "Child is relative of caregiver." Both variables were coded 1 if present and -1 if not present.

Correlations of .2 or larger are underlined to facilitate reading of Table 24. Several of the variables were necessarily negatively correlated because of the way in which they were defined. For example, a home of one status could not be of another status as well. Thus, the first two variables have a negative correlation of -.5. This was true among all sets of variables describing status, site, and ethnicity.

Inspection of the correlations in Table 24 reveals several patterns that help to describe the sample of homes observed. There were more Black caregivers and children in Philadelphia than in San Antonio and Los Angeles. There were also more Hispanics in San Antonio than in Los Angeles and none in the Philadelphia sample. These were the only relationships between site and other independent variables.

Regulated homes had more children between the ages of 12 and 35 months and caregivers who had greater experience. Unregulated caregivers tended to have relatives in care more frequently.

Table 24

INTERCORRELATIONS AMONG INDEPENDENT VARIABLES FOR THE TOTAL OBSERVATION SAMPLE

		BINSITE1	BINSITE2	BINSTAT1	BINSTAT2	BINETH1	BINETH2	NCT012C	NC1235C	NC3659C	NC59PLC	MACGAGE	MACGEXP	MACGEDUC	CGCHILD	CGREL	STDSGEC	AVGAGEC	RATEFEMC	RBLACK	RWHITE	RATEHISC
BINSITE1	Binary on San Antonio vs others	1.00000																				
BINSITE2	Binary on Philadelphia vs others	0.50383	1.00000																			
BINSTAT1	Binary on Regulated vs others	0.08303	-0.05663	1.00000																		
BINSTAT2	Binary on Unregulated vs others	0.18165	-0.04924	-0.54103	1.00000																	
BINETH1	Binary on Black homes vs others	-0.15941	0.28059	-0.00622	-0.06782	1.00000																
BINETH2	Binary on White homes vs others	-0.05475	0.05743	0.06436	0.06707	-0.60150	1.00000															
NCT012C	Number of children less than 12 months	0.05670	0.04704	0.17174	-0.06649	0.02684	0.07193	1.00000														
NC1235C	Number of children 12-35 months	-0.06108	0.11117	0.21130	-0.13446	0.10364	-0.03640	0.19193	1.00000													
NC3659C	Number of children 36-59 months	0.01711	0.04190	0.13393	-0.10781	0.01134	0.11489	-0.00381	0.08635	1.00000												
NC59PLC	Number of children 59+ months	-0.05348	-0.04826	0.02653	0.02843	-0.01558	-0.02579	-0.04152	-0.07310	0.07666	1.00000											
MACGAGE	Caregiver age in years	0.10904	-0.13222	0.09202	-0.10590	0.19893	-0.24581	-0.01370	-0.05187	-0.09317	-0.07656	1.00000										
MACGEXP	Caregiver experience in years	0.13831	-0.04701	0.20880	-0.09935	-0.10035	0.10893	0.07077	0.03276	0.06868	0.03082	0.46983	1.00000									
MACGEDUC	Caregiver education in years	-0.15809	0.12984	-0.01761	0.02358	0.02358	0.35347	0.05483	0.17374	0.11919	-0.06287	-0.32275	-0.16595	1.00000								
CGCHILD	Child is caregiver's child	-0.08246	0.07759	-0.04834	0.19557	-0.11423	0.13856	-0.01525	0.01269	0.10907	0.11677	-0.61840	-0.34516	0.17830	1.00000							
CGREL	Child is relative of caregiver	0.07811	-0.10733	-0.10951	0.21670	0.07384	-0.15887	-0.03527	-0.01800	0.03478	-0.05849	0.23342	0.06121	-0.16338	-0.12275	1.00000						
STDAGEC	Standard deviation of child ages (in months) excluding infants	0.02264	-0.11611	0.10502	0.02918	0.02202	-0.06227	-0.03973	0.05944	0.13621	0.58379	-0.06527	0.04994	-0.06725	0.13578	-0.07567	1.00000					
AVGAGEC	Average age of children (in months) excluding infants	0.00009	-0.05772	-0.07176	0.08326	-0.11691	0.08058	-0.11371	-0.35247	0.33033	0.62013	-0.11470	0.02735	-0.04511	0.12078	-0.08175	0.58201	1.00000				
RATEFEMC	Ratio of female children in home	-0.03301	-0.00641	-0.01192	0.00278	0.08612	-0.11457	-0.02395	0.00117	-0.00511	-0.01073	0.07202	-0.05782	-0.03803	-0.01224	-0.03254	-0.04844	-0.10206	1.00000			
RBLACK	Ratio of Black children in home	-0.21726	0.30424	0.00525	-0.06405	0.92772	-0.57023	0.06521	0.12610	0.01768	-0.00831	0.17513	-0.09999	0.02350	-0.10218	0.07546	-0.02570	-0.13639	0.09302	1.00000		
RWHITE	Ratio of White children in home	-0.01168	0.05588	0.05486	0.05490	-0.61167	0.88416	0.06462	-0.03459	0.09737	-0.01687	-0.25731	0.07241	0.32522	0.16657	-0.17575	-0.07480	0.07840	-0.05713	-0.61139	1.00000	
RATEHISC	Ratio of Hispanic children in home	0.32689	-0.37204	-0.05762	0.01594	-0.33876	-0.39147	-0.12441	-0.11376	-0.11516	0.05480	0.11320	0.03608	-0.45880	-0.05634	0.12725	0.09738	0.06287	0.07246	-0.37544	-0.38446	1.00000

The several age variables were correlated in the expected way. The number of school-age children present tended to raise the average age and increase the standard deviation of ages of children within a home.

Caregiver age was positively related to the number of years of experience and to the likelihood that the caregiver had one or more relatives in care. Caregiver age was negatively correlated to the amount of education and the likelihood that the caregiver had one or more of her own children in care. There was a tendency for the younger caregiver to be White and to provide care for White children. White caregivers not only tended to be younger, but they also tended to have the most years of education.

VI FIELD SITE DEVELOPMENT AND DATA COLLECTION

The quality of the data collected and thus the credibility and usefulness of the findings depend to a large extent on the effectiveness of site development and management and of observer training. Therefore, we took great care to assure that qualified personnel were hired for all positions, that their training was thorough, and that data collection activities were coordinated with those of the research contractor and implemented in accordance with the established procedures and schedules.

This section describes the coordination of field implementation activities by the major contractors; the recruitment, selection, training, and testing of field staff; and data collection procedures, including scheduling of homes and selection of focus children.

Coordination with Other Contractors

As previously stated, three major contractors participated in the NDCHS: SRI International, Abt Associates, Inc., and the Center for Systems and Program Development.* Careful coordination of efforts and exchange of information by these contractors was essential throughout all phases of the study. Figure 3 illustrates the site staff organization.

The three contractors engaged in separate yet integrated site development and data collection activities at each of the three study sites. Although the data collected by the three contractors differed in focus, the overlap of the data collection period was such that coordination among contractors was essential to timely completion of all data collection activities for each contractor. For example, the research contractor was responsible for identifying and providing information about the homes from which the observation data, the caregiver interview data, and, indirectly, the

---

* The responsibilities of each contractor are described in the Foreword of this report.

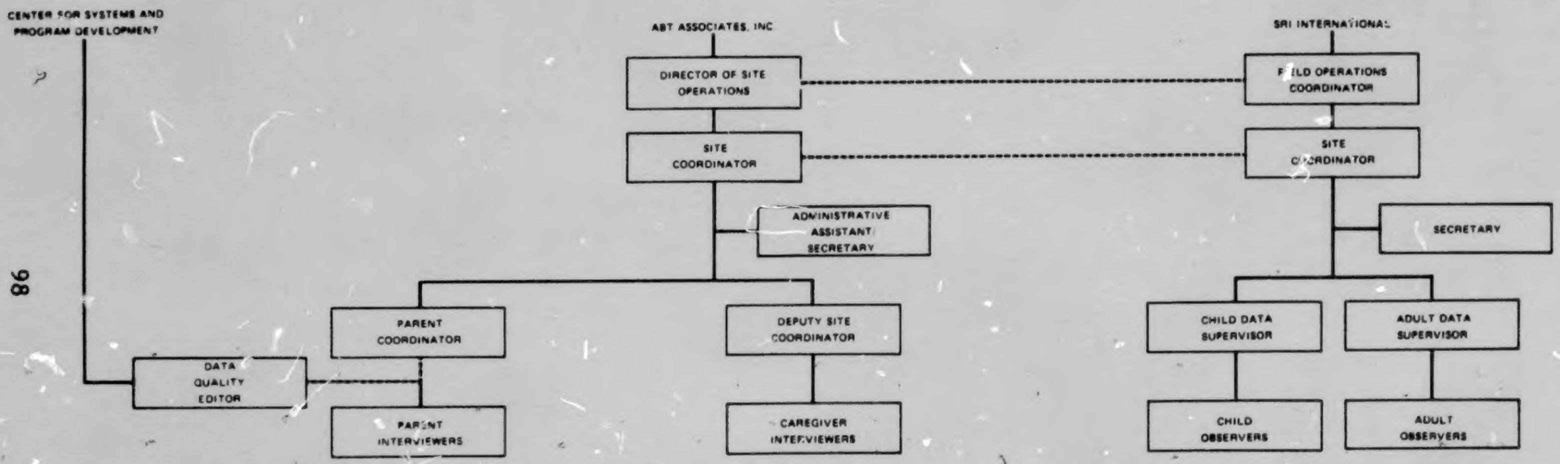

CENTER FOR SYSTEMS AND PROGRAM DEVELOPMENT
ABT ASSOCIATES, INC
SRI INTERNATIONAL
DIRECTOR OF SITE OPERATIONS
FIELD OPERATIONS COORDINATOR
SITE COORDINATOR
SITE COORDINATOR
ADMINISTRATIVE ASSISTANT/ SECRETARY
SECRETARY
PARENT COORDINATOR
DEPUTY SITE COORDINATOR
CHILD DATA SUPERVISOR
ADULT DATA SUPERVISOR
DATA QUALITY EDITOR
PARENT INTERVIEWERS
CAREGIVER INTERVIEWERS
CHILD OBSERVERS
ADULT OBSERVERS

FIGURE 3 SITE STAFF ORGANIZATION

parent questionnaire data would be collected. Thus, all contractors' schedules required that a sufficient number of homes be identified at the time their data collection was slated to begin. To ensure that the schedules would not conflict, recruiting, hiring, and training activities were planned in intercontractor meetings held well in advance of the commencement of site operations.

Other procedures that resulted from intercontractor planning were:

- Schedules and materials for each contractor were exchanged and discussed.
- General information about each contractor's study was given to all trainees.
- Brochures for caregivers and parents that described the study in question-and-answer form were developed, critiqued, and shared by each contractor.
- Directions for coordination were incorporated in the training sessions for all field personnel.
- Weekly logs were exchanged by contractors during data collection.

Because coordinated data collection was essential, the three contractors decided to share office space on site. This facilitated checking daily schedules and resolving problems and was cost effective.

In addition, the contractors' site coordinators in each of the three locations met regularly to review progress and discuss and resolve problems. When it appeared that not enough homes would be identified in time to meet the observation data collection start-up date, SRI, the observation contractor, loaned some staff members to Abt Associates, the research contractor, to hasten the task; and when the recruitment of observation staff was getting under way, the research contractor's site coordinators referred some applicants to SRI and suggested recruiting methods they had found to be effective.

In these ways, the three contractors cooperated to accomplish a coordinated data collection effort.

Selection of Field Personnel

Site development activities for the observation component were concentrated on recruiting and hiring field personnel who were experienced enough to permit them to perform their responsibilities effectively after a relatively short period of training. The observation staff employed at each site consisted of a site coordinator, data supervisors, and observers. In the following sections, the responsibilities for each position, qualifications that were sought, and methods of recruiting are described.

Site Coordinators

The first position to be filled at each location was that of the site coordinator. The coordinator was responsible for setting up the site office and hiring observers and clerical staff. After selecting the staff, the site coordinator managed all site operations, including scheduling homes and assigning observers, supervising the quality of the observers' work, preparing weekly status reports, and working with other contractors' site coordinators.

SRI began the site coordinator search in Los Angeles by contacting people who had participated in previous SRI studies. The position also was advertised in newspapers. Final selection of the site coordinator was made on the basis of her work experience and educational background, knowledge of the Hispanic community, and managerial skills.

Although SRI had no previous work in San Antonio, candidates were referred by Abt Associates, Inc., and by Hispanic consultants. In addition, the position was advertised in newspapers. The candidate selected as site coordinator was chosen for her outstanding administrative and organizational skills.

The Philadelphia site coordinator position was filled by an SRI employee who was about to move to Philadelphia. Her organizational skills and ability to work well with others were highly praised by her managers at SRI. The early appointment enabled her to become acquainted with the study before her departure from SRI.

Observers and Data Supervisors

Observers were responsible for collecting the observation data in the day care homes and for a variety of other tasks, such as completing the Daily Log, editing their booklets, and attending weekly staff meetings.

Two or three observers were selected to assume positions as data supervisors. Their responsibilities were to assist the site coordinator in scheduling homes and assigning observers, to complete a final check of observers' edited booklets, to maintain a log of observers' booklets received and outstanding, to observe in homes, and to perform other tasks as requested by the site coordinator.

Selection of observers and data supervisors was based on several factors: availability at the appropriate times, experience with young children, interpersonal skills, interest in the study, cultural background and bilingual capability (especially for the Hispanic versus non-Hispanic reliability substudy conducted in Los Angeles), and sufficient educational background and basic skills to learn the use of the instruments. All applicants were tested briefly at the interviews to check for the ability to use symbols for recording observed behaviors.

Observers and data supervisors were hired in Los Angeles by the SRI field operations coordinator and the site coordinator. Contacts were made with local colleges, schools, district offices, day care centers, community organizations, and churches. Advertisements were placed in local and community newspapers. Thirty-five women applied for the position. Each was interviewed by the SRI field operations coordinator and a Hispanic observation trainer, and the site coordinator.

Three data supervisors and 23 observers were hired in Los Angeles. Two of the three data supervisors were Hispanic, and one was non-Hispanic.

Observers included 11 bilingual Hispanics; 6 Blacks, including 2 Spanish-English bilinguals; and 6 Whites, including 3 Spanish-English bilinguals. Of the original group of 23 observers, 21 completed training, and of those, 18 trainees (9 Hispanics, 3 Blacks, and 6 Whites) passed all validity tests and conducted observations in the homes.

In Philadelphia and San Antonio, SRI staff and the site coordinators handled recruiting and hiring of data supervisors and observers. In San Antonio, the site coordinator placed advertisements in three newspapers, contacted seven college placement offices and 11 school district personnel offices, contacted teachers in early childhood programs for references, prepared fliers for posting in grocery stores and community centers, and obtained public service radio and television coverage. Approximately 170 people responded. Thirty-six candidates with some college experience and Spanish-speaking skills were selected for interviews. They were interviewed by the SRI field operations coordinator, the training and instrument development supervisor, and the site coordinator. Fourteen observers were selected and asked if they preferred to learn the adult-focused or child-focused instrument. They were then divided into two groups by instrument, and a data supervisor was selected from each group.

In Philadelphia, the site coordinator placed advertisements in major newspapers and posted fliers in locations such as grocery stores and university bulletin boards. She contacted candidates referred by SRI from earlier studies and those referred by Abt Associates, Inc. A total of 75 individuals responded; although 65 were scheduled for interviews, only 39 appeared. Of these, 16 were selected for observation training--8 for adult-focused and 8 for child-focused instruments. One adult-focused observer did not appear for training. Therefore, seven adult-focused observers and eight child-focused observers (one alternate) were trained. Thirteen of the 15 completed the training successfully; one of them, an alternate, was not needed as an observer.

Table 25 breaks down the total number of observers who successfully completed training and collected data by site, ethnicity and language, and instrument.

At each site, a considerable effort was made to recruit a staff whose ethnicity corresponded to the ethnicity of the caregivers who would be observed. The goal was accomplished to a large extent in all sites, except in San Antonio where efforts to recruit Black observers were unsuccessful. Even though 170 persons responded to notices about the jobs and 36 were interviewed, only one Black applicant asked for an interview. She was included in the final selection process but failed to appear for the interview as scheduled.

Note also that all site coordinators, data supervisors, and observers were female, as were all primary caregivers at all sites.

Table 25

NUMBER OF OBSERVERS WHO COLLECTED DATA BY SITE, ETHNICITY, AND INSTRUMENT

Ethnicity/Language	Instrument		
	CC and ABC	CC	ABC
Los Angeles			
White, English only	3		
White, bilingual	3		
Black, English only	1		
Black, bilingual	2		
Hispanic, bilingual	9		
Total	18		
San Antonio			
White, English only		2	3*
White, bilingual		2	2
Hispanic, English only		1	0
Hispanic, bilingual		2	2
Total		7	7
Philadelphia			
White, English only		3	4
Black, English only		3	2
Total		6	6

Note: White = non-Hispanic White.
Black = non-Hispanic Black.
Bilingual = bilingual in Spanish and English.

*One observer collected data for only 2 weeks.

Training

The goal of all training programs was to bring each participant to a level of proficiency that would meet the demands of the study design. Site coordinators needed a grasp of the overall design and the purposes of each element so that they could identify and manage potential problems in the field. Data supervisors were required to develop expert coding skills and the ability to supervise and edit the observers' work. Observers had to learn appropriate use of the instruments, follow correct procedures in a relatively short time, and be able to work independently in the homes.

Site Coordinators

Site coordinators were trained at the SRI offices in Menlo Park as well as in the field. Training sessions included an introduction to the SRI staff; an overview of the project, its purpose, and the general study design; and introductory training in observation instruments and data collection activities. Detailed instructions were given regarding procedures for setting up the site office, recruiting data supervisors and observers, and locating and scheduling practice homes for observation training. The site coordinators were also informed about their supervisory and administrative responsibilities during and after data collection. When they returned to their home locations, they were supervised and trained by SRI's Menlo Park-based NDCHS staff through site visits and daily telephone calls.

Data Supervisors and Observers

Data supervisors were trained by the SRI observation staff in observation and data collection procedures at the observer training sessions held at each site. In addition, they were trained in ways in which they were to assist the site coordinator--to telephone caregivers and schedule observations, to log and edit observation booklets, and to work with observers to correct coding errors.

Observers' training in Los Angeles consisted of a 12-day session in late November and early December 1977, plus a 3-day refresher in January after a 3-week lapse in data collection during the holiday season.

The Los Angeles training session was longer than the sessions conducted in San Antonio and Philadelphia because a major change in the observation system was made between Phase II and Phase III. The Phase II trainers in Los Angeles realized that it was difficult for observers to master all the data collection instruments and their accompanying procedures and that the training period was long and arduous. To alleviate the burden for both trainers and observers and to improve the quality of observation data, we modified the instruments after Phase II so that some observers would collect only caregiver observations and other observers would collect child-focused observations. This procedure made it much easier for observers to learn their tasks and conduct their work reliably. In Phase III, therefore, observers in San Antonio and Philadelphia were assigned to learn either the adult-focused or the child-focused instrument. Nine-day training sessions were held in October 1978. Table 26 shows a sample agenda for the 9-day training session.

Videotapes were the primary tools of observer training. The behaviors of Black, Hispanic, and White caregivers and children in day care homes were videotaped in both natural and structured situations. Observers were taught to code behaviors as they occurred in these tapes. Trainers established criterion protocols by coding some videotapes; observers' coding of the tapes was checked against the protocols periodically throughout training. These informal validity tests allowed the trainers to monitor the progress of each observer and clarify confusion about particular codes.

Observers also learned through practice observations of both natural and structured situations in actual day care homes. Some scheduling difficulties and last-minute withdrawals by caregivers in Los Angeles permitted only some of the observers to practice all the required structured situations. To compensate, SRI trainers and other observers role played the situations for the observers to code. Three visits for each trainee were scheduled in San Antonio and Philadelphia. The third was treated as a practice observation in which each trainee observed for approximately 4 hours, edited the observation booklets, and submitted them to trainers for approval.

Table 26

SAMPLE OBSERVER TRAINING AGENDA

Day	Activity
1	Introduction to study Discussion of observers' role and responsibilities Overview of observation instruments
2	Quiz Coding practice (written vignettes, videotapes)
3	Coding practice Introduction to cover and information sheets Introduction to checklists and observation summary Assign home visits
4	Visit day care homes for 1.5 hours Discuss problems after visit Coding practice in home and again in training session
5	Coding practice Introduction to structured situations (adult observers) Assign home visits
6	Visit day care homes for 1.5 hours Discuss problems after visit Coding practice in home and again in training session
7	Review codes Videotape validity test (child observers) Assign homes for practice observations
8	Practice observation in day care homes Edit and turn in booklets
9	Videotape validity test (adult observers) Feedback on videotape validity test and practice observations Data collection assignments Distribution of observation materials

Such experience in actual day care situations was valuable. The observers became familiar with events typical of observation situations without the pressure of formal data collection, questions were asked and answered, and observers developed their skills in establishing rapport with caregivers and children.

As noted, all observers in Los Angeles (Phase II) were trained on all instruments. In Philadelphia and San Antonio (Phase III), the observers were evenly divided between those who learned only the adult-focused instrument and Book Tally and those who learned the child-focused instrument. Both adult-focused and child-focused observers, however, learned the procedures for completing the Daily Log and for collecting data on the Nutrition and Physical Environment Checklists and the Observation Summary. The following tabulation summarizes the instruments that observers in each phase learned:

		Phase III (San Antonio and Philadelphia)	
Instrument	Phase II (Los Angeles) All Observers	Adult-Focused Observers	Child-Focused Observers
ABC	X	X	
CC	X		X
Book Tally	X	X	
Daily Log	X	X	X
Nutrition Checklist		X	X
Physical Environment Checklist		X	X
Observation Summary		X	X

To meet the requirements of a reliability substudy design in Phase II, Spanish-speaking observers in Los Angeles participated in additional training sessions conducted in Spanish. Videotapes from homes with Spanish-speaking caregivers and children were used for practice coding in both Los Angeles and Philadelphia.

We attempted to assure the comparability of training for all observers and to balance the ethnicity of the observers, the trainers, and the caregivers and children in the videotapes. For example, observers in Los Angeles were trained simultaneously in two groups by one Black, one Hispanic, and two White trainers and one White training supervisor. To minimize trainer effects, the composition of the training teams was changed from time to time during the session.

Quality Control

The observer training program included formal validity tests during and after training. The validity tests had three main purposes. First, without such tests, the quality of the data and thus the findings might be compromised. Second, informal and formal tests during training allowed trainers to assess observers' progress. Finally, trainees were qualified or disqualified for participation in the study on the basis of these tests.

Validity tests were scored by comparing observers' coding with the criterion protocols coded by the trainers. Scores were expressed as a percentage of the total number of codes for which the observers agreed with the criterion.

Trainers whose codes agreed with the criterion at a level above 80% overall were deemed eligible to collect data; however, if a trainee failed to reach 80% accuracy on a specific code, she was required to demonstrate an understanding of that code. Trainees met individually with trainers and were asked to define and give examples of those codes on which they scored below the minimum. In addition, they were asked to identify examples of specific behaviors that would demonstrate their understanding of these codes.

All observers in Los Angeles were tested on their use of both the adult-focused and child-focused instruments. A videotape validity test was administered to all observers at the end of the 12-day training session, on December 1, 1977 (Test 1), and after 2 weeks of data collection, on December 16, 1977 (Test 2). At the end of the 3-day refresher training (January 4 through 6, 1978), an informal validity test was given to all observers. Two weeks later, on January 23, after 2 weeks of data collection, Test 3 was administered. The posttraining test (Test 1) identified those observers whose coding accuracy was adequate for data collection, that is 80% agreement or better with criterion codes. The retests (Tests 2 and 3) provided an opportunity to determine whether any deterioration of coding ability occurred over the 2-week periods.

Observers in Phase III were given two formal validity tests. The first, administered at the end of training, again determined who would be eligible to collect data using the 80% criterion. The second, given after 2 weeks of data collection, determined whether observers maintained an acceptable level of accuracy in coding. Adult-focused observers were tested on the adult-focused instrument and the Book Tally. Child-focused observers were tested on the child-focused instrument. The nature and results of these validity tests are reported in Chapter VII, which describes the quality of observation data.

Finally, trainees were instructed to complete the Nutrition Checklist, Physical Environment Checklist, and Observation Summary when they practiced observing in three different homes during the training session. Trainees observed in pairs during their first two visits to the practice homes and completed the checklists and Observation Summary independently. Their records were compared, and percentages of agreement were computed. Items on which observers disagreed were discussed, and additional training in problem areas was given when necessary.

Administrative Tasks

Certain administrative tasks were required of the SRI field staff to ensure the efficiency of data collection.

Observers were required to perform several administrative tasks: maintaining the Daily Log, editing and returning observation booklets to SRI, and attending weekly staff meetings with the site coordinator.

Daily Logs were completed at the end of each day. The logs contained three sections: (1) unusual events or coding difficulties, (2) comments on specified caregiver behaviors, and (3) comments on the caregiver's or observer's own attitudes about the home. In addition, observers were to supply information about events that they believed might invalidate the data or that might be useful in the analysis. The data from several homes were not used in the analysis because of problems reported in the observers' Daily Logs.

Observers edited their booklets as soon as possible after the observations. Editing included careful checks of details such as identification numbers; appropriate placement of codes in columns; extraneous marks, including double coding; and appropriate marking technique. Edited booklets were submitted to the site office twice weekly.

Observers' editing of observation booklets was rechecked by the data supervisor, who also maintained the log of booklets. Specific problems were corrected immediately through on-site retraining and clarification.

Observer accuracy and morale were maintained through weekly staff meetings. Led by the site coordinator and attended by the observers and data supervisors, these meetings provided opportunities for discussion of progress and problems encountered in the homes. In Philadelphia and San Antonio, adult-focused and child-focused observers also met in separate groups to discuss specific coding problems.

The site coordinator was responsible for informing the SRI field supervisor of all problems in the field and of the data collection schedule in general. Regular telephone contact was maintained, and a duplicate observation schedule was kept at SRI so that scheduling could be adequately monitored and assistance could be offered.

Weekly field reports were submitted to the Administration for Children, Youth and Families (ACYF) and to the Abt Associates, Inc., site coordinator detailing the number of homes observed, the number of dropout homes, and the number of homes scheduled for the following week.

Data Collection Procedures

Observer Assignments

The Phase II study design (for Los Angeles) included data collection for the major observation study as well as the reliability substudy, which tested for effects of Hispanic versus non-Hispanic (Black and White) ethnicity. Data for the major observation study were collected in each home by a single (primary) observer during two mornings of observation. Each observer recorded the activities of caregivers and children using both the adult-focused and child-focused instruments. On the first day of observation, a second (reliability) observer coded activities in the home simultaneously with the primary observer for 1 hour. Observers were carefully mixed and matched by ethnicity, and observer pairs were further mixed and matched with the ethnicity of the caregivers. This enabled analysis of any systematic differences attributable to ethnicity.

Observer assignment procedures were modified for Phase III (Philadelphia and San Antonio). Each observer in Phase III was taught either the adult-focused or child-focused instrument. This specialization by instrument in Phase III required that two observers be assigned alternately to each home. The child-focused observer went to the home for the first day of observation, and the adult-focused observers went on the second day. One observer pair functioned as substitutes. Also, data supervisors were scheduled to observe 3 days each week.

Procedures followed in San Antonio and Philadelphia for assigning homes by observer and caregiver ethnicity also differed from those used in Los Angeles. In Philadelphia, the initial attempt was to have paired observers (one ABC and one CC) matched by ethnicity (three White pairs, two Black pairs, and one mixed pair) who would observe in homes of caregivers of like ethnicity. This plan was devised for two reasons: (1) Phase I and Phase II reliability substudies showed no ethnicity-of-observer by ethnicity-of-caregiver effects and (2) SRI found from site reports that caregivers and observers of like ethnicity felt more at ease with each other. The plan could not be implemented, however, because the first group of homes to be identified and observed had more Black than White caregivers.

If the original pairings had continued, Black observers would have been extremely busy while White observers would not have been working at all, thus risking the gradual loss of observation skills. Therefore, after the second day of data collection, observer pairs were switched so there were two White pairs, one Black pair, and three mixed pairs. This allowed greater flexibility in scheduling because mixed pairs could be scheduled in either Black or White homes. In San Antonio, it was not possible to mix and match observer and caregiver ethnicity as easily as in Philadelphia. The principal concern in San Antonio was to assign Spanish-speaking observers to homes where caregivers used Spanish as the primary language.

Observer assignment also included provisions for stability substudies that examined caregiver behaviors over time. In Los Angeles, no additional observer assignments were required because the data from the first day of observation for the major study were simply compared with data from the second day. For Phase III, however, additional adult-focused data were collected in 24 San Antonio homes 4 weeks after the major observations.

Scheduling of Homes

Efficient use of observer time required careful scheduling of homes for observation. By contractual agreement, the research contractor was responsible for initiating home contacts, explaining the purpose of the study and the observations, describing the observation scheduling, and identifying an equal number of homes within the ethnic groups and within each regulatory status group (sponsored, regulated, and unregulated). The research contractor also was responsible for obtaining parental permission, which was mandatory for a child's participation as the focus of observation. Parental permission for at least 2 children in each home was considered minimal (except in homes where only one child was cared for), and permission for all children in the home was desirable so that any child could be the focus child if necessary.

Before observations were scheduled for a home, it was verified that parental permission was on file for at least one focus child and available information on the child's (or children's) schedule was reviewed to ascertain that the child was in the home (and awake) for at least the minimum of 2 hours required to obtain adequate data.

Selection of Focus Children

In all phases, the study design called for observations in each home to be focused on two children, one 12 to 35 months old (Focus Child 1) and another 36 to 59 months old (Focus Child 2).* Focus children were selected from among those with parental permission according to the following procedures:

- The caregiver's own child was eliminated first because it was assumed that interactions between the caregiver and her own child might not be typical of the day care setting.
- Any other child who was related to the caregiver was eliminated next for the same reason. However, in cases where a relative was the only child in the home, he or she was used as a focus child.

---

* In other chapters of this report, Focus Child 1 is referred to as a toddler and Focus Child 2 is referred to as a preschooler.

- From the remaining children in the home, the youngest child in each group (Focus Child 1 and Focus Child 2) who was of the same ethnicity as the caregiver was selected as a focus child.

The research contractor carefully selected homes with children who met the age requirements; however, all criteria were not met in every home, because family day care homes do not always have a large number of children and because children are frequently absent. Observers were asked to make substitutions for absent focus children when necessary, choosing the child closest in age to the absent focus child and of the same ethnicity as the caregiver when possible.

In many homes, designating one child from each age group as a focus child was not possible. Some homes had only one child or only one child for whom parental permission had been given. When only one child who met the requirements was present, that child was selected and observed twice as often as when two focus children were observed. If only one age group was present, both the youngest and the oldest child from that group were selected as focus children. In these homes, both children were designated as Focus Child 1 or Focus Child 2, depending on the age group they represented. If there were no children of an appropriate age, no observations were conducted on that day and the site coordinator attempted to reschedule observation in the home.

Daily Observation Schedules

The daily observation schedules were designed to achieve a balance between the strictness needed for comparability across homes and the flexibility necessitated by the circumstances in the homes. Thus, observers were given schedules as well as guidelines for adapting the schedules as needed. In all cases, however, observers were instructed to complete all observations of natural situations before introducing the structured situations. This rule was made to ensure that circumstances of structured situations did not influence the caregivers' behavior during observations of natural situations.

Observations were to be alternated between focus children so that each child would be observed for an equal length of time. If one focus child arrived later than the other, the first child was observed exclusively until the second child arrived. The second child was then observed exclusively for an equal length of time as the first, and the observations were alternated between the two children.

The primary observer visited each home in the Los Angeles sample for two mornings and coded both adult-focused and child-focused instruments. The first half-hour was spent establishing rapport with the caregiver and children. The morning's schedule and structured situation activities were explained to the caregiver. Observations of the natural situations were conducted by the primary observer between 8:30 and 11:30 a.m. On the first morning, a second (reliability) observer coded simultaneously with the primary observer to complete one booklet (about 45 minutes) of natural situation observations. The structured situation was observed by the primary observer, usually between 11:30 a.m. and 12 noon.

Observers in Philadelphia and San Antonio followed basically the same schedule, although they were allowed slightly more flexibility in their adjustment of the schedule. All observers were required, however, to observe for a minimum of 2 hours between 8 a.m. and 2 p.m., even if they had to leave the home and return to do so.

In contrast to those in Los Angeles, observers in Philadelphia and San Antonio were trained to code either the adult-focused or the child-focused instrument. The adult-focused and child-focused observers visited the home on different days. The day before observations began in a home, the child-focused observer called the caregiver and verified that the children, especially those designated as focus children, were expected the next day; confirmed the children's schedules (arrival, naps, and lunch); and informed the caregiver when the observer would arrive.

The child-focused observer went to the home the next day, spent approximately the first half-hour establishing rapport and gathering identification information, and observed natural situations only. The adult-focused observer visited on the next day and observed both natural and structured situations. Structured situations were not presented in homes where all the children were under the age of 2 years or where the caregiver exercised her option of refusing to do them.

A total of 99 homes were observed in Los Angeles during a 2-week period in early December 1977 and over a 6-week period in January and February 1978. Observations were suspended during the holiday season because the period was deemed unrepresentative of normal day care circumstances.

Data collection was scheduled for 6 weeks in San Antonio and 4 weeks in Philadelphia. Problems encountered by the research contractor in the early stages of home identification and complications with caregivers' schedules caused an extension of the observation period to 10 weeks in San Antonio and 9 weeks were observed in Philadelphia. A total of 115 homes were observed in San Antonio and 89 in Philadelphia.

VII THE QUALITY OF OBSERVATION DATA

This chapter presents the observation-based analysis variables, describes the rationale for their definition, and summarizes the results of several efforts to estimate their reliability and validity. The chapter begins with a listing of the caregiver variables developed in Phase IV to analyze the data collected in Los Angeles, San Antonio, and Philadelphia. A summary of the factor analytic support for their definition is included. The next section lists the Focus Child 1 and Focus Child 2 analysis variables followed by the factor analytic support for their definition. The third section consolidates the validity data using criterion tapes that were collected in each of the three phases of data collection. Fourth, studies of interobserver agreement in the field are summarized. This section includes special studies of ethnic bias of observers. The fifth section describes the stability of caregiver and child behaviors. Caregiver stability is estimated within a day, between 2 adjacent days, and over a 4-week period. The final section of this chapter presents the results of a study designed to determine the stability of day care homes between mornings and afternoons of the same day. Taken together, these sections present a comprehensive look at the quality of observation data to be used in describing home day care.

Analysis Variables Defined on Adult Behavior

As previously described, the basic unit of adult observation data is a pattern for a single point in time of checked codes across 10 dimensions: Who, Language, Emotion, Nonchild Interaction, To Whom, Facilitate-How, Facilitate-What, and Control-How, Control-What, Control-Explain. The adult observation data base comprised 303 homes across three sites for approximately 93,000 discrete observations (frames). In the Phase II analysis,*

---

* "Phase II analysis" refers to the analysis conducted on Los Angeles data.

23 variables were defined on adult behaviors. A first task for Phase IV analysis was to review that set of variables using both logical and empirical criteria.

The 23 adult analysis variables were based on 279 patterns of codes (see Appendix Table D-1). (These patterns were not mutually exclusive; that is, a unique pattern of codes might be included in the definition of more than one of the 279 patterns.) Because the nonunique 279 patterns were identified in Phase II on logical grounds alone and were not exhaustive, one issue was the extent to which the behaviors that occurred with some frequency in the data base were actually represented in the set of 23 variables. To resolve this issue, we scanned the approximately 93,000 frames of data to identify and count the frequency of occurrence of each unique (mutually exclusive) pattern of codes across the 10 dimensions of the ABC instruments. Some 1,598 unique patterns were identified as occurring one or more times. Only 115 of these unique patterns, however, occurred with a frequency of 100 or more (.001 proportion of the frames or more). Of these 115 patterns, all were represented in the 279 nonunique patterns used to define the 23 adult behavior analysis variables in Phase II. In that sense, the 23 variables were inclusive of the behaviors observed.

Appendix Table D-1 shows the frequency of occurrence of the 279 nonunique patterns on which the 23 Phase II analysis variables were based and the percentage of homes in which those patterns did not occur. On the basis of the data in that table, we decided to drop from further consideration the 139 patterns describing activities of a secondary caregiver. In 95 to 100% of the homes, those patterns simply did not occur.

The remaining 140 nonunique primary caregiver patterns were used to form a set of Phase IV analysis variables, listed in Table 27, and that resulted from a combination of logical and empirical analyses. The first 20 variables are based primarily on distinctions made in the Facilitate-How dimension of the caregiver observation instrument. The first 15 consist of five sets of three each for teaches, plays/participates, helps, directs, converses. In each case, a set of variables is defined for activities with Focus Child 1, for activities with Focus Child 2, and a total.

Table 27

PHASE IV ANALYSIS VARIABLES

1. Primary caregiver teaches C1 (Focus Child 1)
2. Primary caregiver teaches C2 (Focus Child 2)
3. Primary caregiver teaches - total
4. Primary caregiver plays/participates with C1
5. Primary caregiver plays/participates with C2
6. Primary caregiver plays/participates - total
7. Primary caregiver helps C1
8. Primary caregiver helps C2
9. Primary caregiver helps - total
10. Primary caregiver directs C1
11. Primary caregiver directs C2
12. Primary caregiver directs - total
13. Primary caregiver converses with C1, not negative
14. Primary caregiver converses with C2, not negative
15. Primary caregiver converses - total
16. Primary caregiver supervises and prepares for children
17. Primary caregiver converses with another adult
18. Primary caregiver involved in housekeeping
19. Primary caregiver involved in recreational activity
20. Primary caregiver not involved (out of range or room)
21. Primary caregiver facilitates prosocial behavior with any children
22. Primary caregiver facilitates affection with any children
23. Primary caregiver facilitates comfort with any children
24. Primary caregiver facilitates language/information with C1
25. Primary caregiver facilitates language/information with C2
26. Primary caregiver facilitates language/information - total
27. Primary caregiver facilitates structured fine motor with C1
28. Primary caregiver facilitates structured fine motor with C2
29. Primary caregiver facilitates structured fine motor - total
30. Primary caregiver facilitates dramatic play - total
31. Primary caregiver facilitates exploratory fine motor with any children
32. Primary caregiver facilitates work with C1
33. Primary caregiver facilitates work with C2
34. Primary caregiver facilitates work - total
35. Primary caregiver facilitates music/dance - total
36. Primary caregiver facilitates gross motor activities with any children
37. Primary caregiver facilitates TV with any children
38. Primary caregiver facilitates physical needs with C1
39. Primary caregiver facilitates physical needs with C2
40. Primary caregiver facilitates physical needs - total
41. Primary caregiver interacts with a baby
42. Primary caregiver interacts with a school-aged child
43. Primary caregiver expresses positive affect
44. Primary caregiver expresses negative affect
45. Primary caregiver controls - total
46. Primary caregiver controls dangerous situation
47. Primary caregiver controls antisocial situation
48. Primary caregiver strictly controls any children

As indicated in Appendix Table D-2, the first 15 Phase IV analysis variables represent a breakdown of what were only three analysis variables in Phase II. Phase IV analysis variables 16, 17, and 20 are synonymous with three Phase II analysis variables--supervises/prepares, converses with another adult, not involved, while Phase IV analysis variables 18 and 19 represent a separation of housekeeping from recreational activities, which were combined in Phase II. The next 20 Phase IV analysis variables (numbers 21 through 40) are based primarily on distinctions made in the Facilitate-What dimension of the ABC instrument. Variables 23 and 37 are synonymous with variables in Phase II (facilitates comfort and facilitates any TV), but the remaining variables represent breakdowns of Phase II variables. Prosocial behavior was separated from affection (Phase IV variables 21 and 22); language/information, structured fine motor activity, and dramatic play were separated and for the first two a further distinction was made between Focus Child 1, Focus Child 2, and total (Phase IV variables 24 through 30). Phase IV variables 31 through 34 separate exploratory fine motor activity from work; variables 35 and 36 separate music/dance from gross motor activity; and variables 38, 39, and 40 separate physical needs by Focus Child 1, Focus Child 2, and total.

Phase IV variables 41 through 44 are synonymous with variables from Phase II (i.e., interacts with baby, interacts with school-age child, expresses positive affect, expresses negative affect). The remaining variables (45 through 48) describe controlling behavior. Except for variable 48 (strict control), these variables represent distinctions not made in Phase II between dangerous and antisocial behavior.

To summarize the relationship between Phase IV and Phase II analysis variables, for the most part Phase II variables can be obtained by forming simple additive composites of Phase IV variables. Two Phase II variables were dropped (i.e., Spanish and neutral affect) on the grounds that they had not been useful in past substantive analyses.

Not all the Phase IV analysis variables are mutually exclusive because they are defined on nonunique patterns; for example, a frame could be counted for adult code pattern number 1 (primary caregiver teaching Focus Child 1) and adult code pattern number 116 (primary caregiver facilitates language/information with Focus Child 1). Table 28 depicts the relationship between the Facilitate-How and Facilitate-What dimensions of the ABC instrument.

From Table 28, it is clear that an analysis of language/information variables is essentially an analysis of a subset of the teach variables. In general, the majority of teaching was oriented toward language/information, physical needs, structured fine motor and prosocial activities. Caregiver play/participate behavior was spread across approximately half of the Facilitate-What alternatives. A majority of help behaviors were for physical needs and to a lesser extent for structured fine motor activity. Caregivers used relatively few "direct" behaviors; when they did direct, it might be for physical needs, work, or fine or gross motor activities. Conversation codes were synonymous for the two dimensions. These relationships (Table 28) should be kept in mind when interpreting subsequent analyses of adult behaviors.

Partial support for the definition of Phase IV analysis variables came from factor analyses for subsets of the 279 nonunique patterns of behaviors. Two sets of patterns were factor analyzed: One set consisted of those defining the first seven Phase II variables, essentially the Facilitate-How patterns, and the other set consisted of those patterns defining Facilitate-What patterns. Within each set, the patterns were mutually exclusive whereas, as indicated previously, this was not the case between sets. The other nine Phase II variables were judged on logical grounds to be tightly defined (for the most part based on a single pattern of behavior) and of separate interest in substantive analyses. The nine variables were not factor analyzed.

Rotated factor matrices for the two sets of patterns are reported in Appendix Tables D-3 and D-4. In each case, the factor analysis was simply a principal component's resolution of the pattern-by-pattern intercorrelation matrix with ones in the main diagonal. The number of eigenvalues equal to or greater than 1 was used to decide on the number of factors to be rotated using the varimax criterion.

Table 28

RELATIONSHIPS BETWEEN FACILITATE-HOW AND FACILITATE-WHAT DIMENSIONS*

	Language/ Information	Physical Needs	Fine Motor, Structured	Conversation	Educational TV	Prosocial	Noneducational TV	Affection	Work	Dramatic Play	Gross Motor	Comfort	Music dance	Fine Motor, Exploratory	No activity
Teach	8,212	1,161	2,564			1,315			239	106	131			302	
Play/participate	547		941		1,076		959	1,673		739			182		
Help		6,586	1,679								470	331			
Direct		511	221						844		220				616
Conversation				2,401											

---

*All entries are frequencies of frames across the three sites for the 115 most frequently occurring patterns.

The first set containing 46 patterns distinguished among types of Facilitate-How behavior and types of nonchild interactions. It also indicated when the caregiver was out of range. Appendix Table D-3 presents the rotated 15-factor structure. Factors 1, 3, 4, 5, 6, 10, 13, 14, and 15 essentially distinguish Facilitate-How behaviors into those directed at Focus Child 1, Focus Child 2, group, and other young child. Each of these factors included high loadings (arbitrary criterion of |.3| or more) from one or more patterns in each of the areas of teach, play/participate, help, direct, and converse.

For Focus Child 1, Focus Child 2, and other young child, there were two factors, one for positive emotion and one for neutral emotion. On the basis of these results, we decided to separate Phase II Facilitate-How analysis variables to distinguish between Focus Child 1 and Focus Child 2. Because frames coded as other young child could be indicating children of the ages of either Focus Child 1 or Focus Child 2, the decision was made not to form separate variables for young child oriented behaviors. Instead, each Facilitate-How category was represented by a total across levels of the Whom dimension. Further, in the interest of creating a parsimonious set of analysis variables, the decision was made not to distinguish between positive and neutral emotion.

Factor 2 contained high positive loadings for the positive emotion teach patterns and modest positive loadings for the neutral emotion teach patterns. Factor 7 and, to some extent, factor 9 contained high to moderate loadings for "direct" patterns, whereas factor 8 contained high to moderate loadings for the "converse" patterns. Thus, the decision to distinguish among teach, direct, and converse behaviors in forming analysis variables received factor analytic support. However, there were no factors for play/participate or help.

Factor 11 had a high positive loading for preparation and a high negative loading for recreation. Rather than combining these with opposite weights for analysis, they were kept separate in analysis variables 16 and 19, respectively. Supervise activities were also included in variable 16 despite a zero loading on factor 11. Factor 12 received a high loading for housekeeping and a modest loading of the opposite sign for supervise. Together, these two factors supported the decision to create separate analysis variables for housekeeping and recreation, which had been combined in Phase II.

The second set containing 51 patterns distinguished among the 13 codes within the Facilitate-What dimension of the ABC instrument. A factor analysis of these 51 patterns resulted in a 16 factor solution. The varimax rotated factor structure is presented in Appendix Table D-4. Three of the factors had primarily high loadings on Focus Child 1 patterns (factors 3, 8, 12), two of the factors had high loadings on Focus Child 2 patterns (factors 2, 5), three of the factors had high loadings on other young child patterns (factors 1, 7, 11), and one of the factors had high loadings on group-oriented behaviors (factor 6). The remaining seven factors could each be identified with a separate Faciliate-What code and contained high loadings across Focus Child 1, Focus Child 2, group, and young child codes of the Whom dimension.

Table 29 relates each of the 16 factors to one or more of the Facilitate-What codes. The first three columns represent Focus Child 1 factors, the next two columns represent Focus Child 2 factors, and the next three columns represent young child factors, and the next column represents the only group factor. For these nine columns of Table 29, an X represents a factor loading of |.3| or greater (Appendix Table D-4). The last seven columns represent factors that tended to be specific to a Facilitate-What code. For those columns, an X indicates that most of the |.3| or greater loadings on the factor were for the four variables defining a Facilitate-What dimension (Appendix Table D-4).

The results displayed in Table 29 provide factor analytic support for creating separate analysis variables for each of the 13 Facilitate-What codes and, within several, for distinguishing Focus Child 1 from Focus Child 2. Although there is also support for forming young child and group variables, this was not done for the reasons given previously in reference to the Facilitate-How dimension. Considering the three Focus Child 1 factors as a set, they are completely crossed with the 13 Facilitate-What codes. The two Focus Child 2 factors are crossed with all but five of the Facilitate-What codes.

The last seven columns in Table 29 provide support for forming separate variables for prosocial, affection, dramatic play, exploratory fine

Table 29

FACTORS IDENTIFIED BY FACILITATE-WHAT CODES*

	Focus Child 1			Focus Child 2		Young Child			Group	Code-Specific Factors						
	F_3	F_8	F_{12}	F_2	F_5	F_1	F_7	F_{15}	F_6	F_4	F_9	F_{10}	F_{11}	F_{13}	F_{14}	F_{16}
1. Prosocial		X				X		X				X				
2. Affection	X				X	X								X		
3. Comfort	X					X										
4. Language/information		X		X												
5. Structured fine motor		X		X	X		X		X							
6. Dramatic play	X			X				X							X	
7. Exploratory fine motor			X			X				X						X
8. Work		X			X	X	X									
9. Music/dance	X			X				X	X							
10. Gross/motor	X		X		X			X			X					
11. Educational TV		X											X			
12. Noneducational TV	X						X									
13. Physical needs			X		X	X										

---

*An X in the first nine columns indicates a factor loading of |.3| or more.
An X in last seven columns indicates a cluster of loadings, most of which exceed |.3|.

motor, gross motor, and educational television. Support for distinguishing among the other seven codes of the Facilitate-What dimension comes from an analysis of the factors reported in the first nine columns of Table 29. The Focus Child 2 factors separate language/information and music and dance and work from physical needs. Further, the Focus Child 1 factors separate comfort and noneducational television from structured fine motor activity, whereas the young child factors separate comfort from noneducational television. In short, all 13 Facilitate-What codes were identified separately in the factor analysis.

Because there were separate factors for prosocial, affection, dramatic play, exploratory fine motor, and gross motor, the decision was made to form one analysis variable for each. Although there was a separate factor for educational television, there was no separate factor for noneducational television nor was there clear support for separating Focus Child 1 from Focus Child 2 data for television variables. Thus, a single analysis variable was made for all television behaviors. Although there were no separate factors for language/information, structured fine motor, work, and physical needs, within each there were separate factors for Focus Child 1 and Focus Child 2. Therefore, each type of behavior was separated into three analysis variables--Focus Child 1, Focus Child 2, and total. Separate Focus Child 1 and Focus Child 2 analysis variables were not made for music and dance because of the low frequency of occurrence of these behaviors, especially for Focus Child 2 (see Appendix Table D-1). The same decision and reasoning applied to comfort.

Analysis Variables Defined on Child Behavior

In Phase II, 27 analysis variables were defined on child behaviors, once for Focus Child 1 and once for Focus Child 2 (see Appendix Table D-5). In Phase IV, 28 analysis variables were defined on child behaviors, once for Focus Child 1 and once for Focus Child 2 (see Appendix Table D-6).

The patterns used to define the 28 Phase IV analysis variables were the 86 unique patterns that occurred 100 or more times in the approximately 90,000 frames of Focus Child 1 and Focus Child 2 data collected during the Phase III observations. The mean occurrence for each of the 86 unique patterns is presented in Appendix Table D-7. Appendix Table D-8 shows some of the relationships between Phase II and Phase IV analysis variables. Excluding the last four variables, the Phase IV analysis variables for child data are mutually exclusive in their definitions (the last four variables are totals). All the 86 most frequently occurring patterns (see Appendix Table D-7) are included in both Phase II and Phase IV sets of analysis variables.

The 28 Phase IV analysis variables for child data were, as in the case of adult variables, defined on the basis of a combination of logic and empirical findings. Using Phase III data, two separate factor analyses were made of the 86 most frequently occurring unique patterns, once for Focus Child 1 data and once for Focus Child 2 data. The factor analysis procedures were as defined for the adult variables. The Focus Child 1 data yielded the 31 factors presented in Appendix Table D-9, and the Focus Child 2 data yielded the 31 factors presented in Appendix Table D-10.

Because having variables defined the same for both sets of child data was desirable, we compared the two factor structures. The method for comparing factor structures was as follows:

(1) For each solution, all factor loadings equal to or greater than $|.3|$ were identified.

(2) Using only identified loadings, the best match between two factors across the two-factor structures was identified.

(3) For a pair of matched factors, additional patterns were identified that satisfied the criterion $|.3|$ or better in one factor structure and $|.15|$ or better in the other factor structure but with identical algebraic sign.

(4) Common factors were defined by the patterns identified in steps (2) and (3) above for each pair of matched factors.

These four steps identified 16 common factors, which are defined according to code patterns (see Appendix Table D-11).

There was strong factor analytic support for analysis variables 1 (prosocial, common factor 10), 2 (affectionate, common factor 14), 5 (dramatic play, common factor 11), 7 (language/information, common factor 2), 8 (fine motor structured activity, common factor 4), 16 (watches educational TV, common factor 7), 17 (watches noneducational TV, common factor 16), and 24 (controlled by caregiver, common factor 3). For these eight variables the match to a factor was either perfect or the one or two discrepant patterns clearly did not belong logically or failed to load on any factor.

Two additional variables represented a combining of two common factors--factors 9 and 15 for variable 14 (gross motor activity) and factors 5 and 8 for variable 19 (physical needs while interacting with caregiver). In addition, the five patterns in common factor 6 all went into the definition of variable 27 (total for focus child with other children), the five patterns in common factor 12 went into the definition of variable 26 (total for focus child alone), and the two patterns in common factor 13 went into the definition of variable 28 (total for focus child with caregiver).

The remaining analysis variables were formed on a logical basis despite the lack of factor analytic support. The fine motor exploratory activity patterns failed to have substantial loadings on any common factors with the exception of pattern 1, which loaded on several. Three fine motor exploratory activity variables were formed distinguishing behavior alone, with another young child and with the caregiver (variables 9, 10, and 11). The two TV alone patterns failed to load on any common factor and so were combined to form variable 15. The three physical needs alone patterns did not load on any common factor and formed variable 18. All but two of the seven "monitor" patterns were without high loadings on a common factor and were used to define variable 25. The remaining variables (distress, seeks attention of caregiver, engages in work, music/dance, conversation with young child, conversation with caregiver, antisocial to young child, and controls young child) were defined on three or fewer patterns that were judged to be of special interest in substantive analyses (see Appendix Table D-6 for definitions of these variables).

Summary of Phase IV Analysis Variables

The phase IV analysis variables defined on observation data consisted of 48 variables to describe caregiver behaviors and 28 variables to describe child behaviors. The 28 analysis variables for child data were defined once for Focus Child 1 data and once for Focus Child 2 data.

A combination of empirical and logical criteria were used in forming the 48 Phase IV caregiver analysis variables. First, the definitions of the 48 variables were required to include all the unique patterns of behavior that occurred in the sample of observation frames at least 0.1% of the time. Second, separate factor analyses were conducted for the Facilitate-How patterns of behavior and the Facilitate-What patterns of behavior. One of the main findings from these two factor analyses was the need in defining variables to distinguish between caregiver behavior toward Focus Child 1 and caregiver behavior toward Focus Child 2. This distinction and several others between codes within dimensions of the observations instrument were clear in the factor analytic results but had not been made in Phase II analyses. Third, several analysis variables were defined purely on logical grounds and were not included in the factor analyses. These analysis variables were typically defined on a single pattern of behavior and were known a priori to be of interest in the analyses to follow (e.g., caregiver interacts with baby).

The relationship between codes within the Facilitate-How dimension and codes within the Facilitate-What dimension of the observation instrument was analyzed to describe the necessary redundancy between these two sets of caregiver analysis variables. For example, the analysis makes clear that caregiver Helps variables (variables 7 through 9) are largely redundant with caregiver facilitates physical needs variables (variables 38 through 40). Further, the language/information variables are a large subset of the teach variables. These interdependencies among caregiver analysis variables provide further understanding of their meaning and should be kept in mind when interpreting results of subsequent analyses.

The definitions of the 28 child variables were also required to include all patterns of behavior that occurred in 0.1% or more of the frames in the observation sample. Two independent factor analyses of child behavior patterns were conducted, once for Focus Child 1 data and once for Focus Child 2 data. Fortunately, the results of these two factor analyses supported the creation of a single set of variables with common definitions across the data for Focus Child 1 and Focus Child 2. This common set of variables will facilitate the comparison of results in subsequent analyses between younger (Focus Child 1) and older (Focus Child 2) children in day care homes.

Criterion Tape Validity Analysis

In all three data collection phases of the study, videotapes of caregiver and child behaviors were used to ensure that observers in the field were knowledgeable in the use of the observation instruments. In all three phases, 80% or greater agreement between an observer and a criterion was required before that observer would be used in the actual field-based data collection. The criterion was created by the mutually agreed-on codes trainers assigned when viewing the videotapes. Although the primary purpose of the videotapes was quality control, the data generated by their use represents an important statement about the likely validity of observation data used in substantive analyses.

Phase I Criterion Tape Validity

In Phase I, the validity of observers was estimated by having them code a set of criterion videotapes at the end of training and again at the conclusion of data collection. Three videotapes were shown to trainees at the end of training to test their coding accuracy on the ABC and SNAP. Sixteen trainees were hired as observers when they showed an 80% overall agreement with the three criterion videotapes. At the end of data collection, the 16 observers were shown two of the same videotapes (one for ABC, one for SNAP). Because the SNAP instrument was not used in subsequent phases of the study, validity data for that instrument are not summarized here.

End-of-training error rates for each trainee were calculated for the two ABC videotapes. End-of-data-collection error rates were established for only one tape. Error rates were calculated for each trainee by dividing the number of incorrect codes in each dimension by the number of examples used for analysis. Scores for the Who dimension were not calculated because coding for this dimension did not vary. Table 30 presents the mean validity scores across all trainees for each dimension. Error rates were subtracted from 100%, yielding the percentage of correct codes or reliability scores.

Table 30

MEAN RELIABILITY SCORES FOR VIDEOTAPE TESTS RELATED TO ABC

Phase I (San Francisco)

(Percent)

	Facilitate				Restrict						
	To Whom	How	What	Child Rep.	How	What	Explain	Other	Emotion	Language	Total
Tape A											
Pretest	95%	92%	93%	75%	99%	99%	98%	98%	99%	87%	94%
Posttest	91	83	88	72	99	99	97	96	98	84	91
Overall	93	89	91	74	99	99	98	97	99	86	93
Tape B											
Pretest	94	89	94	88	98	98	97	96	99	86	94

The percentage of agreement with the criterion tape decreased by 3% from the end of training to the end of data collection. Both pretest and posttest data collection scores for all dimensions for both tapes were well above the 80% standard, except for the Child Response dimension on one tape, which received an overall score of 74%. Observers had difficulty shifting their attention from the caregiver, who is the primary focus of the observation, to the child.

In addition to agreement with a criterion, agreement between eight random pairs of trainees was calculated. If agreement between pairs of observers was greater than agreement with the criterion, the validity of codes or training would need to be examined. Table 31 compares the mean agreement of the eight random pairs with the mean criterion agreement. For all dimensions, agreement for random pairs was equal to or less than agreement with the criterion.

As a final part of the posttraining validity test in Phase I, two trainers role played a mother reading Kitten for a Day to a child. Trainees tallied as the "mother" demonstrated seven teaching behaviors. These tallies were compared with a criterion tally. For each of the seven behaviors tallied, the number of incorrect or missing tallies recorded by trainees was calculated as a percentage of the number of criterion tallies. This "error percentage" was totaled across behaviors. Total reliability for each trainee was determined by the following equation:

$$100\% - \frac{\text{Accumulated error percentage}}{\text{7 teaching behaviors}} = \text{Percentage correct}$$

Table 31

COMPARISON OF AGREEMENT BETWEEN RANDOM PAIRS OF
OBSERVERS AND CRITERION AGREEMENT
(Percent)

Phase I
(San Francisco)

Dimension	Random Pairs	Reliability
To Whom	88%	93%
Facilitate-How	71	77
Facilitate-What	80	87
Child Response	60	65
Restrict-How	79	88
Restrict-What	69	73
Restrict-Explain	58	73
Other	72	84
Emotion	97	97
Language	81	86

Overall reliability for all trainees was 80%. Seven of the 16 trainees did not earn an 80% reliability score, and they were retrained and retested. Of those retested, four still received scores below 80%. Since their aggregate scores of ABC, SNAP, and Book Tally were 80% or higher, they were not rejected as observers on the basis of their low Book Tally scores.

Phase II Criterion Tape Validity

In Phase II, a videotape validity test was administered to all observers at the end of the 12-day training session and after 2 weeks of data collection. Furthermore, at the end of a 3-day refresher training after the holiday season, an informal validity test was given to all observers. Two weeks later, a third and final validity test was administered. The posttraining test (Test 1) identified those observers whose coding accuracy was adequate for field data collection. The retests (Tests 2 and 3) provided us the opportunity to determine whether any deterioration of coding ability occurred over the 2-week periods.

The validity test was developed from approximately 30 field videotapes. The test material was presented in segments each of which featured a different focus person. Six Hispanic, four Black, and eight White caregiver segments as well as eight Hispanic, three Black, and eight White child segments were shown. Test 1 contained 37 segments of which 18 were ABC and 19 were CC. Tests 2 and 3 contained the first 17 segments of Test 1 of which 9 were ABC and 8 were CC. (For Test 3, the 17 segments were reordered to minimize retest effects.)

Tables 32 and 33 show the percentages of agreement between all observers and the criterion videotape by dimension for the ABC and CC. The overall observer agreement with criterion videotape was again high, with few percentages lower than 0.90 on any of the validity tests. Observer accuracy was particularly high on validity Test 2. Although scores on validity Test 3 were slightly lower than scores on validity Test 2, they were generally higher than those on validity Test 1. Practice in the field tended to improve observer accuracy. The reader is reminded that Test 3 was administered 2 weeks after observations were resumed after the holiday break and a brief refresher training session. It is not surprising that observer accuracy was higher during Test 2 because observers had been using the instruments continuously without a break.

Phase III Criterion Tape Validity

In Phase III for both sites, the CC validity test was administered to the child-focused trainees on the seventh day of training and the ABC validity test was administered to the adult-focused trainees on the ninth day. The CC validity test comprised 19 segments (of varying lengths) of videotapes focused on Black, Hispanic, and White children. The ABC validity test had two parts. Part 1 consisted of 20 segments (of varying lengths) of videotapes focused on Black, Hispanic, and White caregivers. Part 2 measured coding accuracy on the Book Tally; it consisted of a structured reading situation role-played by two trainers.

Table 34 shows the results of the CC and ABC end-of-training validity tests administered in San Antonio and Philadelphia. All San Antonio observers passed this test at 89% or better; all Philadelphia observers passed the test at 85% or better. Two trainees in Philadelphia did not pass the test and therefore were not permitted to collect data in the field. One trainee in Philadelphia, hired as an alternate, passed the test at 91% but was not needed as an observer.

15~

Table 32

OVERALL PERCENTAGE AGREEMENT OF OBSERVERS AND CRITERION VIDEOTAPE FOR DIMENSIONS OF ABC

	Validity Test		
Dimension of ABC	1	2	3
Cancel	99.9%	100.0%	100.0%
Who	98.9	100.0	100.0
Auxiliary	92.8	94.4	93.9
Whom	85.4	92.0	87.7
Facilitate-How	81.9	89.8	86.0
Facilitate-What	85.6	88.2	87.8
Control-How	97.6	98.7	97.9
Control-What	96.2	98.1	97.3
Control-Explain	94.9	96.5	96.0
Emotion	84.4	90.3	86.7
Language	89.2	93.9	89.5

Table 33

OVERALL PERCENTAGE AGREEMENT OF OBSERVERS AND CRITERION VIDEOTAPE FOR DIMENSIONS OF CC

	Validity Test		
Dimension of CC	1	2	3
Cancel	99.9%	100.0%	100.0%
Who	98.1	100.0	99.9
Activity	82.8	94.7	92.6
Auxiliary	88.5	93.1	88.1
Whom	85.9	92.9	89.5
Mode	80.6	89.0	83.9
Emotion	85.8	91.9	91.7
Language	92.2	93.8	92.5

Table 34

RESULTS OF END-OF-TRAINING VALIDITY TEST
ON CC AND ABC
(On-Site Calculations)
Phase III

CC		ABC	
Observer Number	Percentage of Agreement with Criterion	Observer Number	Percentage of Agreement with Criterion
San Antonio			
201	89.3%	211	90.2%
202	89.8	212	92.4
203	93.7	213	96.5
204	92.0	214	97.0
205	90.1	215	94.3
206	95.0	216	97.0
207	92.3	217	92.5
Philadelphia			
601	79.1%*	611	94.5%
602	85.7	612	94.7
603	90.4	613	85.6
604	91.5	614	91.5
605	85.1	615	93.9
606	93.1	616	94.3
607	93.9	617	76.6*
608	91.5†		

*Trainee did not pass validity test and did not collect data.

†Alternate trainee was not needed and did not collect data.

The CC and ABC validity tests were administered again in San Antonio and in Philadelphia to determine whether any changes had occurred in observers' accuracy after the first 2 weeks of data collection.

Results of the second validity test are presented in Table 35. The overall agreement between observers and criterion was high. As was true in Phase II, observers tended to maintain and improve their skills over 2 weeks of data collection. The test results are particularly impressive because the observers did not have daily opporunities to use their observation skills since homes were identified more slowly than was scheduled.

In addition to the two validity checks on ABC and CC data, a formal validity test on the Book Tally was administered to trainees at the end of training. A scenario, role played by trainers, was observed and specific behaviors were tallied by trainees. Answers were then compared with a criterion protocol previously established by the trainers. All trainees passed the tests with 80% accuracy or better except one in Philadelphia (this trainee also failed to pass the ABC tests and therefore did not qualify as an observer).

Summary of Criterion Tape Validity

In each of the three data collection phases of the study, trained observers were required to reach or surpass 80% agreement with a criterion tape before they were permitted to collect observation data in the field. This criterion did eliminate a few of those who received training. In each phase of data collection, criterion tapes were also used to check the validity of observer coding after they had been in the field collecting data. No evidence was found of any drop in validity after field experience. To the contrary, in Phases II and III and validity of coding appeared to increase slightly as the result of field experience.

Interobserver Reliability

Interobserver reliability was investigated as a part of data collection efforts in both Phase I and Phase II. In Phase I, a subsample of homes was observed for 1 hour on each of 2 adjacent days by two observers.

Table 35

RESULTS OF SECOND VALIDITY TEST
Phase III

CC		ABC	
Observer Number	Percentage of Agreement with Criterion	Observer Number	Percentage of Agreement with Criterion
San Antonio			
201	94.8%	211	94.5%
202	97.2	213	95.9
203	98.9	214	94.9
204	93.1	215	94.9
205	94.8	216	94.9
206	98.1	217	92.9
207	95.9		
Philadelphia			
602	88.2%	611	93.5%
603	92.0	612	94.9
604	96.1	613	89.2
605	90.4	614	91.9
606	94.5	615	93.9
607	96.4	616	93.7

The design of this study was such that it not only afforded overall estimates of interobserver agreement, but also allowed a test for the possibility of ethnic bias in observations of Black and White observers. In Phase II, interobserver reliability was estimated for a subsample of 30 homes. This time each home was observed by a pair of observers for only 1 hour of 1 day. Again, the substudy was designed to test for ethnic bias in observation. In Phase II, however, the focus was on Hispanic/ non-Hispanic comparisons. Phase I and Phase II interobserver reliability findings are summarized in the following two sections.

Phase I Interobserver Reliability

In Phase I, pairs of trained observers coded simultaneously for an hour each morning for 2 adjacent days in 30 of the homes visited. These field observations were used to assess the overall reliability of the several dimensions (i.e., columns of codes) and codes within dimensions of the ABC. The field study was designed so that it was possible to assess the extent to which the reliability of the ABC depended on a match between ethnicity of observer and ethnicity of caregiver.

Many alternative ways exist to describe interobserver agreement for the ABC used in a natural home day care environment. For each dimension (or code within dimension), the coding of two observers can be summarized as follows.

		Observer 1	
		Present	Not present
Observer 2	Present	A	B
	Not present	C	D

Three different indices of agreement between observers were used to summarize interobserver agreement based on the cell frequencies A through D. These three indices of interobserver agreement and the relative frequency of occurrence of a behavior are shown in Table 36. In each case, the value reported is across all pairs of observers for the 30 homes.

Table 36

INDICES OF INTEROBSERVER AGREEMENT ON ABC IN NATURAL SITUATIONS

Phase I
(San Francisco)

Dimension	Dimension Exact Codes	$\frac{A+D}{A+B+C+D}$	$\frac{A}{A+B+C}$	ϕ	$\frac{A}{A+B+C+D}$
Who	0.98	1.00	--	--	1.00
Main caregiver		0.98	0.98	0.90	0.89
Aide		0.998	0.93	0.96	0.03
Aide		1.00	--	--	0.0
Older child		1.00	--	--	0.0
Other adult		1.00	--	--	0.0
Caregiver out		0.99	0.86	0.92	0.06
To Whom	0.78	0.93	0.91	0.84	0.67
Focus Child 1		0.94	0.66	0.76	0.11
Focus Child 2		0.94	0.60	0.71	0.09
Focus Child 3		0.96	0.57	0.71	0.05
Nonfocus young child		0.97	0.72	0.82	0.08
Group		0.88	0.56	0.66	0.16
Older child		0.99	0.57	0.72	0.02
Other adult		0.99	0.78	0.87	0.04
Facilitate-How	0.70	0.89	0.74	0.76	0.31
Teach		0.94	0.50	0.64	0.06
Play/participate		0.93	0.34	0.47	0.04
Help		0.93	0.54	0.65	0.08
Read		1.00	0.73	0.84	0.01
Suggest		0.93	0.33	0.46	0.04
Praise		0.99	0.22	0.35	0.002
Facilitate-What	0.71	0.89	0.74	0.76	0.31
Language/information		0.97	0.60	0.73	0.05
Fine motor, structured		0.95	0.51	0.65	0.06
Fine motor, exploratory		0.95	0.33	0.47	0.03
Dramatic play		0.99	0.33	0.49	0.01
Music, dance		0.99	0.58	0.73	0.01
Gross motor		0.99	0.48	0.64	1.00
Work/chores		0.99	0.37	0.53	0.01
Physical needs		0.98	0.70	0.81	0.06
Educational TV		1.00	--	--	0.0
Noneducational TV		0.998	0.31	0.49	0.001
Prosocial		0.99	0.34	0.50	0.01
Other		0.96	0.20	0.31	0.01

(continued next page)

Table 36 (Concluded)

Dimension	Dimension Exact Codes	$\frac{A+D}{A+B+C+D}$	$\frac{A}{A+B+C}$	ϕ	$\frac{A}{A+B+C+D}$
Child Response	0.49	0.89	0.73	0.75	0.31
Active		0.82	0.33	0.39	0.09
Passive		0.85	0.30	0.38	0.07
Inattentive		0.99	0.17	0.28	0.002
Mixed		0.95	0.27	0.40	0.02
Restrict-How	0.81	0.98	0.41	0.57	0.02
Neutral		0.98	0.39	0.55	0.02
Harsh		0.999	0.36	0.57	0.001
Restrict-What	0.79	0.98	0.41	0.57	0.02
Safety		1.00	--	--	0.0
Antisocial		0.99	0.29	0.44	0.002
Wild		1.00	--	--	0.0
Activity		0.98	0.32	0.48	0.01
Request		0.998	0.33	0.50	0.001
Other		1.00	--	--	0.0
Restrict-Explain	0.80	0.98	0.39	0.55	0.02
Yes		0.99	0.23	0.37	0.003
No		0.98	0.34	0.50	0.01
Other	0.75	0.88	0.80	0.76	0.47
Affection		0.99	0.47	0.63	0.01
Comfort		0.995	0.42	0.59	0.004
Conversation		0.92	0.52	0.64	0.09
Supervise		0.93	0.62	0.72	0.12
Nonchild		0.94	0.77	0.83	0.19
Emotion	0.97	0.98	0.98	0.86	0.92
Positive		0.99	0.10	0.18	0.002
Negative		1.00	--	--	--
Neutral		0.97	0.96	0.78	0.90
Language	0.78	0.98	0.98	0.86	0.92
Long		0.86	0.62	0.67	0.23
Short		0.84	0.32	0.39	0.08
None		0.87	0.76	0.74	0.41

A = Both observers coded.
B = Primary observer coded, reliability observer did not.
C = Reliability observer coded, primary observer did not.
D = Neither observer coded.

The index in the first column, A+D/A+B+C+D, describes the proportion of agreement where the base was the total number of frames observed. This index reflects the proportion of times when two observers were in agreement on whether an activity was present. Thus, this index will necessarily be high for low-frequency events.

The index in the second column, A/A+B+C, describes the proportion of agreement where the base was the total number of frames for which either one or the other or both observers selected the code. The upper bound of this index is the value of the index in the second column. The lack of a code does not reflect observer agreement.

The index in the third column, ϕ, is the traditional phi correlation between the two dichotomous variables. The ϕ index has an upper limit of less than 1, except when the marginal proportions to code were equal for the two observers. Further, the depression of the upper limit becomes greater as the marginal proportions deviate from 0.5. Because these conditions held for virtually all the data reported here, the phi coefficient underestimates the actual interobserver agreement. Still, it is a traditional index and so provides a useful baseline for comparison with other studies.

The last column, A/A+B+C+D, is an index not of agreement but rather of the proportion of total frames observed for which both observers agreed that the coded activity was present. This will be used as an estimate of how often the activity occurred.

Indices of agreement at the dimension level indicate the extent to which the two independent observers agreed to check a code under that dimension. The dimensions Who, To Whom, Emotion, and Language were to always be coded unless the caregiver was involved in nonchild activities. For the other seven dimensions, however, the observer had first to decide whether the caregiver's technique was facilitative, restrictive, or other. As can be seen in Table 36, interobserver agreement for the always coded dimensions was nearly perfect. The three Facilitate dimensions necessarily had equal interobserver agreement, as did the three Restrict dimensions (phi coefficients of 0.76 and 0.57, respectively).

Perusal of specific code levels within dimension revealed some interesting patterns. The Who dimension codes were all reliably observed. The To Whom dimension codes were also coded with high reliability. The A+D/A+B+C+D indices were all above 0.88, and the phi coefficients were above 0.70 (with one exception, 0.66 for Group). Two of the six codes within the Facilitate-How dimension did not appear to function well in that they occurred less than 1% of the time (read and praise). Despite its low frequency of occurrence, however, read was reliably coded $\phi = 0.84$.

Using the standard of A+D/A+B+C+D, all Facilitate-How codes were agreed on by two observers 93% of the time or more. Despite their typically low frequency of occurrence, the Facilitate-What codes were also reliably coded (ϕ approximately 0.5 or higher). Almost all the frames coded for Emotion were seen as neutral, and the reliability was high. Finally, two of the three Language dimension codes were coded reliably, the exception being short language.

In summary, the observers trained in the Phase I pilot study were able to code the ABC in natural day care home environments reliably. The index that described observer code agreement at the code level, where decisions both to code and not to code were considered, never dropped below 80% and was typically in the mid to high 90% range.

In addition to estimating the overall interobserver agreement at code and dimension levels, in Phase I we also studied the possibility of ethnic bias in the observation data.

A split plot design, shown in Table 37, was used to test several hypotheses about correlation between the four independent variables--ethnicity of primary observer, ethnicity of reliability observer, ethnicity of caregiver, and day of observation--and the dependent variables of interobserver agreement on code selection within a dimension. The independent variables for ethnicity of observer and caregiver were represented by 2 levels, Black and White. There were also 2 days of observation for each home using the same pair of observers. Five observers were nested within each level of ethnicity of primary observer. Primary observers were

Table 37

SPLIT PLOT DESIGN TO TEST CORRELATION BETWEEN INDEPENDENT AND DEPENDENT VARIABLES

Primary Observer	Ethnicity of Caregiver	Time 1				Time 2 Same as Time 1
		Black		White		
	Ethnicity of Reliability Observer	B	W	B	W	
Black	O_1					
	O_2					
	O_3					
	O_4					
	O_5					
White	O_6					
	O_7					
	O_8					
	O_9					
	O_{10}					

crossed with the remaining three independent variables.* Unfortunately, the reliability observers were an extraneous source of variation in the design. For example, a primary observer may also be a reliability observer elsewhere in the design. Further, observer pairs were assigned to homes in a nonsystematic but not necessarily random manner within these design constraints. Finally, the design in Table 37 indicates more homes than were actually observed. In fact, some data were represented more than once in the analyses to complete the design. Even though the difficulties of conducting the study under pilot conditions greatly impinged on implementation of the design as envisaged, the question was of sufficient importance to proceed with analysis.

The hypotheses of particular interest were interactions between the ethnicity of the primary observer (P) and that of the reliability observer (R) and interactions between P, R, and the ethnicity of caregiver (C). A P x R interaction could be significant for either of two reasons, both of which would have implications for the quality of observation data. First, the P x R interaction would be significant if observers of one ethnicity coded a set of behaviors differently than observers of the other ethnicity. Such a difference in validity of coding would result in Black/White pairs of observers agreeing at a lower rate than pairs of observers of the same ethnicity. Second, the P x R interaction would be significant if pairs of one ethnicity had an average rate of agreement different from that of pairs of the other ethnicity. The P x R interaction reflected the extent to which the interobserver agreement was correlated with a match between ethnicity of observer and ethnicity of observed.

Many other hypotheses could have been tested but interpreting them was difficult. (Note that the factors of ethnicity of the primary observer and ethnicity of the reliability observer had the same substantive interpretation because the distinction was artificial to allow a test for P x R interaction.) The day of observation (T) may be like a first trial versus remaining trials distinction, which is common in research on learning. Unfortunately, the design did not afford a test of this interpretation because there were only two levels.

---

* Although 30 homes were visited by pairs of observers, eight White and eight Black primary observers, data from only five White and five Black primary observers were used in the analyses. Eliminations were made because the data were incomplete.

Eleven separate univariate analyses of variance were calculated for the balanced split plot design. The balanced nature of the design was important, because the percentage of observer agreement dependent variables clearly violated the assumption of analysis. Analysis of variance of fixed effects for a balanced design is robust to (not affected by) violations of assumptions about normality and equal variance. The 11 analyses were for the 11 dimensions of the ABC used to describe caregiver behavior in a natural environment.

The results of the 11 analyses of variance are reported in Table 38, where rows represent sources of variation testable in the design and columns represent the 11 different dependent variables. At the top of each column is the grand mean for observer agreement. This index of agreement differs from that reported in Table 36 in that the observer must agree on both dimension and code within dimension. Other entries in the table are calculated values of an F-test statistic, which had in each case 1 and 8 degrees of freedom. The sheer number of F tests calculated made formal rules for tests of significance suspect. Still, some may find that comparison with a tabled critical value is a useful rule of thumb for sorting through the results. The critical values of F with 1 and 8 degrees of freedom are 5.32 and 11.26 for Type I error rates of 0.05 and 0.01, respectively. Whichever criterion is used, the overall error rate will be higher but of an indeterminant value.

The entries in Table 38 for sources of variation in P x R and P x R x C are uniformly small. None of the entries exceeded the critical value at the 0.05 level despite the liberal nature of the criterion for the total set of 22 tests. The sample size was small, however, and the lack of significance may reflect a lack of statistical power.

The means for interobserver agreement are reported in Table 39, where the 11 columns represent the 11 dependent variables. Careful inspection reveals small and somewhat inconsistent differences across cells for a given dependent variable. Clearly, there is no reason to believe that

Table 38

MATCH BETWEEN ETHNICITY OF OBSERVER AND ETHNICITY OF CAREGIVER (F TEST)

Source	Who	To Whom	Facilitate			Restrict			Other	Emo-tion	Lang-uage
			How	What	Child	How	What	Explain			
Grand mean	0.98	0.78	0.70	0.71	0.49	0.81	0.79	0.80	0.75	0.97	0.78
P	0.65	2.99	9.45	2.34	1.55	0.93	1.06	1.27	1.03	0.38	3.23
R	0.71	0.89	0.0	0.16	0.51	0.32	0.67	0.10	0.02	0.01	0.01
C	15.86	0.32	0.08	0.06	0.59	4.15	2.63	2.49	0.07	9.16	0.12
T	0.0	1.01	0.51	0.03	0.23	7.44	0.32	1.48	0.44	0.31	0.32
O(P)											
PR	0.04	0.41	0.02	0.60	1.60	0.26	0.16	0.0	1.19	0.25	0.37
PC	1.25	0.01	0.22	0.58	0.42	0.90	0.75	0.08	0.12	0.40	0.17
RC	0.65	0.34	0.03	0.96	0.98	0.0	0.19	0.75	0.49	0.01	0.0
PT	0.0	0.07	2.96	1.72	0.42	0.45	0.13	0.87	0.62	0.05	1.85
RT	0.01	0.10	0.01	0.05	0.0	0.85	0.57	1.01	0.07	0.04	2.79
CT	0.08	11.11	10.18	42.36	7.11	0.78	2.45	2.95	4.16	1.74	11.12
PRC	0.0	0.96	0.01	0.98	2.80	0.82	2.48	0.94	3.76	0.03	4.21
PRT	0.32	1.31	0.43	0.02	0.01	0.22	0.0	0.02	0.65	0.04	8.99
PCT	0.01	1.63	0.20	0.24	1.13	4.00	2.74	3.26	0.0	0.06	1.44
RCT	0.03	0.13	0.39	1.44	0.03	0.03	0.03	0.21	0.58	0.01	1.92
PRCT	1.11	0.54	0.06	1.55	0.0	0.77	1.44	2.33	0.91	0.32	8.15

Note:

P = Primary observer ethnicity.
R = Reliability observer ethnicity.
C = Caregiver ethnicity.
T = Day 1 or Day 2.

Table 39

P × R × C MEAN RATES OF AGREEMENT BY DIMENSION

	Reliability Observer	Who	To Whom	Facilitate			Restrict			Other	Emotion	Language
				How	What	Child Restrict	How	What	Explain			
Black caregiver												
Black Primary Observer	B	1.00	0.75	0.66	0.64	0.45	0.73	0.66	0.74	0.71	0.98	0.75
	W	0.99	0.78	0.64	0.69	0.36	0.64	0.62	0.67	0.71	0.98	0.73
White Primary Observer	B	1.00	0.80	0.77	0.73	0.59	0.80	0.77	0.83	0.76	0.98	0.79
	W	0.99	0.83	0.77	0.79	0.48	0.85	0.85	0.85	0.80	0.98	0.82
White caregiver												
Black Primary Observer	B	0.97	0.76	0.65	0.74	0.56	0.83	0.75	0.73	0.70	0.96	0.73
	W	0.97	0.74	0.66	0.65	0.41	0.83	0.90	0.83	0.79	0.96	0.79
White Primary Observer	B	0.98	0.78	0.73	0.68	0.46	0.91	0.89	0.89	0.85	0.97	0.83
	W	0.98	0.82	0.74	0.74	0.62	0.85	0.85	0.90	0.70	0.97	0.78

Black and White observers were using different criteria when coding behavior. Nor is there any reason to believe that they differ in accuracy.

Table 40 reports the same data averaged across dependent variables. The first entry in a cell is the mean across dependent variables, and the second entry is the standard deviation across dependent variables. A useful baseline for interpreting differences within the table is formed by comparing the entries in the two middle rows for Black caregiver and the two middle rows for White caregiver. The two sets of middle rows provide independent estimates of the same situation--observer pairs not matched on ethnicity. Clearly, the differences between these middle rows are as great as the differences between their average and the other rows, which supports the lack of significance for the P x R and P x R x C interactions. Further, the differences of interest are small and in most cases less than 5%. Thus, there is no reason to believe that for the observers in Phase I interobserver agreement was correlated with ethnicity.

There were, however, a few scattered large values of the F test statistic in Table 38. In some cases, the large F values were a function of extremely powerful tests of significance. For example, the ethnicity of caregiver main effect produced large F values for the Who and Emotion dimensions. The observer differences in mean agreement were about 1%. The grand means of 0.98 and 0.97, respectively, make clear that there was almost no variance for these variables because values could not exceed 1.00.

The ethnicity of caregiver by day of observation source of variation did produce several large values of F across the 11 dependent variables. Means for the x interaction are provided in Table 41, where the 11 columns represent the 11 dependent variables. Considering just the To Whom through Facilitate-What Language dependent variables (for which there are large values of F) reveals a pattern that has White caregivers observed most reliably on the first day and Black caregivers observed most reliably on the second day. The differences within a day were slightly larger than 5 percent. When data were averaged across all dependent variables, as shown in Table 42, the pattern changed slightly to reflect differences between ethnicity of caregiver for only the first day. Interpretation of these results is not straightforward. As noted previously, this may have represented something like a trial effect.

Table 40

P x R x C MEAN RATES OF AGREEMENT AVERAGED ACROSS DIMENSIONS

Phase I
(San Francisco)

	Reliability Observer	$\bar{X}$	σ
Black caregiver			
Black Primary Observer	B	.74	.15
	W	.71	.17
White Primary Observer	B	.79	.11
	W	.81	.12
White caregiver			
Black Primary Observer	B	.76	.12
	W	.78	.15
White Primary Observer	B	.80	.15
	W	.80	.11

Note:

$\bar{X}$ = Mean across dependent variables.

σ = Standard deviation across dependent variables.

Table 41

T × C MEAN RATES OF AGREEMENT BY DIMENSION

			Facilitate			Restrict					
	Who	To Whom	How	What	Child Restrict	How	What	Explain	Other	Emotion	Language
Day 1											
Black caregiver	0.99	0.77	0.67	0.65	0.42	0.71	0.75	0.78	0.69	0.98	0.74
White caregiver	0.98	0.82	0.76	0.77	0.60	0.77	0.78	0.75	0.79	0.97	0.80
Day 2											
Black caregiver	0.99	0.81	0.75	0.78	0.52	0.80	0.70	0.77	0.80	0.98	0.81
White caregiver	0.98	0.74	0.63	0.63	0.43	0.94	0.91	0.93	0.73	0.96	0.76

Table 42

TIME BY ETHNICITY OF CAREGIVER: MEAN RATES OF AGREEMENT AVERAGED ACROSS DIMENSIONS

Phase I
(San Francisco)

	$\bar{X}$	σ
Day 1		
Black caregiver	.74	.15
White caregiver	.78	.10
Day 2		
Black caregiver	.78	.12
White caregiver	.78	.16

Note:

$\bar{X}$ = Mean across dependent variables.

σ = Standard deviation across dependent variables.

Phase II Interobserver Reliability

In Phase II, as stated previously, each home was described by 23 adult behavior variables and 27 child behavior variables. The child behavior variables were defined once for children from 12 to 35 months old (Focus Child 1) and once for children from 36 to 59 months old (Focus Child 2). The reliability of those 77 analysis variables is discussed here. Because these variables are similar to those in Phase IV, the results have bearing on those data as well.

In Phase II, the interobserver reliability substudy design called for observations to be made in 16 Hispanic and 16 non-Hispanic day care homes, as outlined in Table 43. Each block of observers consisted of four observers, two of which were Hispanic and two non-Hispanic. As in Phase I, one of the Hispanic observers was designated as a primary observer and the other as a reliability observer. A similar designation was made for the two non-Hispanic observers within each block.

For purposes of this reliability substudy, pairs of observers were sent into each home, and no home was observed by more than one pair of observers. As an example, for the first block of observers, the first cell is defined as consisting of an Hispanic primary observer and an Hispanic reliability observer simultaneously observing in a day care home where the caregiver is also Hispanic. The second cell consists of the same Hispanic primary observer being paired with the non-Hispanic reliability observer for that block in a home where the caregiver is Hispanic, and so on.

The design required 1 hour of simultaneous observation by two observers in each of the 32 homes. During each hour of observation, 45 frames of caregiver behavior were recorded using the ABC, and 45 frames of child behavior were recorded with the CC by each of the two observers. Observer agreement across frames then could be described in a variety of ways.

Within ethnicity of caregiver, homes initially were randomly assigned to cells of the design. Because of difficulties in recruiting homes, however, the design as originally conceived was not fully realized. First, the two cells containing an X in Table 43 were empty. Second, the original design used 4 x 4 latin squares to control for order effects in experiences

Table 43

DESIGN OF PHASE II RELIABILITY SUBSTUDY

(Los Angeles)

(P) Ethnicity of Caregiver		Hispanic (H)				Non-Hispanic (NH)			
(H) Ethnicity of Primary Observer		Hispanic		Non-Hispanic		Hispanic		Non-Hispanic	
(R) Ethnicity of Reliability Observer		H	NH	H	NH	H	NH	H	NH
(B) Random Blocks of Observers	1								
	2								
	3			XX		X			
	4					X			

of Hispanic primary observers and non-Hispanic primary observers. Again because of recruitment problems, this facet of the design was dropped.

In addition to the description of the sample provided in Table 43, one-third of the non-Hispanic caregivers were Black and two of the non-Hispanic observers were Black. For the Hispanic caregiver homes, the percentage of frames coded as Spanish spoken ranged from 00 to 62% with a mean of 30%. With one exception, all Hispanic homes observed by non-Hispanic observers either had a low frequency of Spanish spoken or the non-Hispanic observer was bilingual. The exception is indicated by two Xs in the design matrix.

The interobserver reliability for each of the 77 analysis variables was estimated using a correlation between members of the pairs of observers across the sample of 32 homes. For the 23 adult variables, there were 45 frames of data from each of the 32 homes. For the 27 variables defined on Focus Child 1, there were from 15 to 45 frames of data for each of 25 homes, and for the same 27 variables defined on Focus Child 2, there were from 15 to 45 frames of data for each of 14 homes. The variance in number of frames depended on whether children of both ages (Focus Child 1 and Child 2) were present and which child was observed first in the adult, child, adult, child, adult, child sequence.

When interpreting interobserver reliability, it is useful to have a sense of the relative frequency of occurrence for the variable under study. The relative frequency of occurrence of each of the adult variables for the reliability sample is reported in the second column of Table 44. Data are based on 2 days of natural observation as reported by the primary observer. The relative frequency of occurrence of those 23 adult variables for the total sample of the field study are reported in the first column of Table 44. A description of the representativeness of the reliability sample is obtained by comparing column 1 data with column 2 data. For all variables, the relative frequency of occurrence for the two samples is similar.

The interobserver correlations are reported in Table 45, variable by variable, for each of the three sets of variables. Of the 23 adult behavior variables, 17 had interobserver correlations of .80 or higher. The negative control (A317) and negative affect (A523) variables had undefined

Table 44

ADULT VARIABLES--AVERAGE FREQUENCY OF OCCURRENCE

Phase II
(Los Angeles)

Variable Number	Variable Name	Total Sample	Reliability Sample
A101	Teach	.10	.09
A102	Play/participate, help, direct	.17	.18
A103	Conversation/child	.04	.05
A104	Supervise, prepare	.20	.23
A105	Conversation/adult	.07	.05
A106	Housekeeping, recreation	.32	.30
A107	Out of room	.02	.02
A208	Affection	.02	.02
A209	Comfort	.00	.00
A210	Language, structured fine motor, dramatic play	.10	.11
A211	Exploratory fine motor, work	.02	.02
A212	Music/dance, gross motor	.03	.02
A213	Educational/noneducational TV	.01	.00
A214	Physical needs	.08	.09
A315	Positive control	.01	.01
A316	Routine control	.02	.02
A317	Negative control	.00	.00
A418	Use of Spanish	.09	.15
A419	Interacts--infants	.04	.02
A420	Interacts--older children	.01	.01
A521	Positive affect	.05	.04
A522	Neutral affect	.40	.40
A523	Negative affect	.00	.00

Table 45

FIELD DATA INTEROBSERVER CORRELATIONS, VARIABLE BY VARIABLE

Phase II
(Los Angeles)

Adult	Teach A101	Play/ partic, help, dir A102	Conver-sation/ child A103	Suprvs, prepare A104	Conver-sation/ adult A105	Hskpg, recreation A106	Out of room A107	Affection A208	Comfort A209	Lang FM Str, DP A210	FM--expl, Work A211	Music dance, GM A212
$r_{O_1O_2}$	.90	.84	.73	.92	.92	.93	.89	.80	.52	.98	.94	.96

	Ed/ non-ed TV A213	Physical needs A214	Positive control A315	Routine control A316	Negative control A317	Use of Spanish A418	Interacts--infants A419	Interacts--older ch A420	Positive affect A521	Neutral affect A522	Negative affect A523
	1.0	.91	-.04	.81	-	.97	.99	.98	.55	.89	-

Focus Child I	Interacts--self C1101	Interacts--Cg, adult C1102	Interacts--young ch, group C1103	Interacts--infant, older ch C1104	Affection C1205	Distress, attn-seeking C1206	Lang, FM Str, DP C1207	FM--expl, Work C1208	Music dance, GM C1209	Ed/ non-ed TV C1210	Physical needs C1211	Anti-social, Control C1212	All routine convers C1313
$r_{O_1O_2}$	.85	.90	.92	.96	.35	.86	.95	.85	.88	.97	.96	.81	.35

	Initiates routine comments C1314	Rec routine comments C1315	Resp to routine comments C1316	All task comments C1317	Initiates task comments C1318	Rec task comments C1319	Resp to task comments C1320	Observes C1321	Use of Spanish C1323	Does nothing C1422	Actively involved C1424	Positive affect C1525	Neutral affect C1526	Negative affect C1527
	.13	.58	-.08	.68	.70	.45	.37	.91	.60	-	.81	.57	.82	.60

Focus Child II	Interacts--self C2101	Interacts--Cg, adult C2102	Interacts--young ch, C2103	Interacts--infant, older ch C2104	Affection C2205	Distress, attn-seeking C2206	Lang, FM Str, DP C2207	FM--expl, Work C2208	Music/ dance, GM C2209	Ed/ non-ed TV C2210	Physical needs C2211	Anti social, Control C2212	All routine convers C2313
$r_{O_1O_2}$	.70	.93	.87	.29	.73	.73	.95	.88	.97	-	.99	.93	.68

	Initiates routine comments C2314	Rec routine comments C2315	Resp to routine comments C2316	All task comments C2317	Initiates task comments C2318	Rec task comments C2319	Resp to task comments C2320	Observes C2321	Use of Spanish C2323	Does nothing C2422	Actively involved C2424	Positive affect C2525	Neutral affect C2526	Negative affect C2527
	.87	.85	-	.86	.76	.88	.77	.90	.82	-	.89	.45	.91	-

correlations because those variables had zero frequency of occurrence. The interobserver correlation for positive control (A315) was essentially zero; however, the variable was recorded as occurring in only 1% of the frames. A .52 correlation for comfort (A209) was obtained despite a frequency of occurrence that rounded to less than 1% of the frames. Only the variable positive affect (A521) had a reasonable frequency of occurrence (.04) and still did not have a particularly high interobserver correlation.

Fourteen of the 27 variables defined on Focus Child 1 and 15 of the 27 variables defined on Focus Child 2 had interobserver correlations of .80 or higher. The correlation for does nothing (C1422 and C2422) was undefined for both age groups, again because of zero frequency of occurrence. In addition, educational/noneducational TV (C2210), child responds to routine comments (C2316), and negative affect (C2527) had undefined correlations for Focus Child 1 and Child 2. The remainder of the troublesomely low correlations were age specific. For Focus Child 1, prosocial behavior, affection (C1205), two conversation variables (C1313, C1315), child receives and child responds to task-related comments (C1319, C1320), and negative affect (C1527) were in the .30 to .60 range. However, of these variables, only child receives task-related comments (C1319) had reasonable variance to support a correlation. For Focus Child 2, interacts with other children (C2104) was the only low correlation not yet discussed and that resulted from low frequency of occurrence.

To summarize, most of the 77 adult and child variables in Phase II were either observed reliably—with .80 interobserver correlations or higher—or had a low to zero frequency of occurrence. For adult and child variables, positive affect (A523, C1525, C2525) needed definitional work. In addition, for younger children, child receives task-related comments (C1314) and child responds to routine comments (C1316) had variance but were not reliably observed.

In Phase I, we studied the reliability of observations to determine whether it varied with ethnicity of observer or ethnicity of caregiver, where ethnicity was defined as White or Black. The results of those investigations indicated that the observation instrument worked equally well for observing White and Black caregivers regardless of whether the observer was White or Black. Based on those results, no distinction was made between White and Black caregivers or observers in designing the Phase II field data reliability study.

One of the primary instrument development goals of Phase II, however, was to modify the observation instrument and observer training program so that Hispanic caregivers could be observed equally as reliably as Black or White caregivers regardless of whether the observer was Hispanic. The purposes of this modification were to support cross-ethnicity substantive analyses and to allow in Phase III the possibility of having Hispanic observers observe Hispanic caregivers. For language reasons, this possibility would be an obvious design convenience.

In formulating the design presented in Table 43 we were was motivated by the question of whether the instrument and training modifications had been sufficient to meet the goal of providing reliable data on Hispanic caregivers. The design for investigating Hispanic/non-Hispanic effects in Phase II represents some improvements over the Phase I design for Black/White differences. First, observer variance was more carefully controlled than it was in the Phase I design. Second, homes were more carefully assigned to cells to avoid possible confoundings. Third, the reliabilities studied were for analysis variables rather than codes and dimensions in the observation instrument as was the case in Phase I.

The data implied by Table 43 were analyzed as a completely crossed 2 x 2 x 2 x 4 analysis of variance. The ethnicity of caregiver, ethnicity of primary observer, and ethnicity of reliability observer factors all represent fixed effects, that is, all levels of interest of the variable are included in the design. The block factor was treated as random because, within ethnicity, observers were randomly assigned to blocks and because the investigators were interested in generalizing from the 16 observers in the study to similarly selected and trained observers in future studies. Data for the two empty cells were estimated by adding to the grand mean the column mean deviation and the non-Hispanic caregiver row mean deviation (from the grand mean). Thus, for each index of reliability, there was one observation for each of the 32 design cells.

For any given dependent variable (i.e., an index of observer agreement), the sources of variance and the degrees of freedom are presented in

Table 46 (where P is ethnicity of primary observer, R is ethnicity of reliability observer, H is ethnicity of primary caregiver, and B is random blocks of observers).

The dependent variables analyzed were based on adult variables only. This was because 5 of the 32 homes had no Focus Child 1 and 16 of the 30 homes had no Focus Child 2. One index of interobserver reliability used as a dependent variable was the correlation between observers within a home across the 23 adult behavior analysis variables. To the extent that the two observers for a home agreed in their reported relative frequencies of each of the 23 variables, the between-observers across-variables correlation will be high. To the extent that such a correlation is not high, however, it is of interest to know on which variables the lack of agreement occurred. Thus, an additional index of within-home interobserver reliability was defined. The index was simply the absolute value of the difference in frequency between the two observers in a home on a variable. This defined an additional 23 dependent variables for the analysis of variance. These differences represent lack of observer agreement.

Means on each of the 23 indices of interobserver agreement for each of the 8 cells defined by the intersection of the three fixed-effect ethnicity factors are reported in Table 47. The second and third columns of means for Hispanic caregivers are interchangeable in that each represents agreement data for observers of different ethnicity. The same is true for the second and third columns of means for non-Hispanic caregivers. Except for random fluctuations, the means in the second and third columns should be equal.

The means for the interobserver correlations across the 23 variables (row 1) are uniformly high with no clear systematic variance across the eight cells. Similarly, the means of interobserver differences in relative frequency are uniformly low with no clear systematic variance across the eight cells.

Results from the 24 four-way completely crossed analyses of variance are reported in Table 48. Across the top of the table are the 24 indices

Table 46

ANALYSIS OF VARIANCE SOURCE TABLE FOR THE RELIABILITY SUBSTUDY DESIGN

Phase II
(Los Angeles)

Sources of Variance	Degrees of Freedom
Mean	1
P	1
B	3
R	1
H	1
PB	3
PR	1
PH	1
BR	3
BH	3
RH	1
PBR	3
PBH	3
BRH	3
PRH	1
PBRH	3
Total	32

Notes:

P = Ethnicity of primary observer.
R = Ethnicity of reliability observer.
H = Ethnicity of primary caregiver.
B = Random blocks of observers.
Multiple letters indicate interaction effects.

Table 47

MEANS OF ABSOLUTE DIFFERENCES BETWEEN PAIRS OF OBSERVERS FOR EACH CELL IN THE RELIABILITY SUBSTUDY

Phase II
(Los Angeles)

	(P) Ethnicity of Caregiver	Hispanic (H)				Non-Hispanic (NH)			
	(H) Ethnicity of Primary Observer	Hispanic		Non-Hispanic		Hispanic		Non-Hispanic	
	(R) Ethnicity of Reliability Observer	H	NH	H	NH	H	NH	H	NH
	Variable $R_{O_1O_2}$	.95	.98	.98	.98	.98	.97	.90	.97
A101	Teach	.06	.02	.05	.03	.01	.01	.07	.05
A102	Play/participate, help, direct	.07	.03	.04	.06	.03	.06	.03	.04
A103	Conversation/child	.04	.03	.02	.02	.03	.02	.05	.04
A104	Supervise, prepare	.03	.02	.04	.02	.06	.04	.10	.04
A105	Conversation/adult	.01	.01	.03	.00	.00	.00	.03	.02
A106	Housekeeping, recreation	.03	.05	.04	.02	.03	.03	.10	.05
A107	Out of room	.01	.02	.00	.00	.00	.00	.02	.00
A208	Affection	.01	.01	.01	.00	.01	.01	.00	.02
A209	Comfort	.01	.00	.01	.00	.00	.00	.00	.00
A210	Language, structured fine motor, dramatic play	.04	.02	.01	.02	.04	.00	.04	.03
A211	Exploratory fine motor, work	.03	.01	.01	.00	.00	.01	.02	.02
A212	Music/dance, gross motor	.01	.01	.00	.00	.01	.00	.01	.02
A213	Educational/noneducational TV	.00	.00	.00	.00	.00	.00	.00	.00
A214	Physical needs	.00	.02	.02	.02	.06	.04	.03	.03
A315	Positive control	.01	.01	.02	.01	.01	.00	.00	.01
A316	Routine control	.02	.02	.01	.01	.02	.01	.01	.02
A317	Negative control	.00	.01	.00	.00	.00	.00	.00	.00
A418	Use of Spanish	.07	.02	.06	.04	.00	.00	.00	.00
A419	Interacts--infants	.00	.00	.01	.00	.02	.00	.00	.01
A420	Interacts--older children	.01	.02	.00	.00	.00	.00	.01	.00
A521	Positive affect	.03	.01	.06	.04	.01	.04	.01	.02
A522	Neutral affect	.08	.03	.06	.05	.04	.06	.05	.06
A523	Negative affect	.00	.00	.00	.00	.00	.00	.00	.00

Table 48

ETHNICITY OF CAREGIVER/ETHNICITY OF OBSERVER FIELD DATA RELIABILITY EFFECTS
Observer 1-Observer 2 Difference Scores

Phase II
(Los Angeles)

Variables	$R_{O_1O_2}$	Teach A101	Play/ Participate, Help, Direct A102	Conver-sation/ Child A103	Supervise, Prepare A104	Conver-sation/ Adult A105	House-keeping, Recreation A106	Out of Range A1[illegible]	Affection A208	Comfort A209	Language, Structured Fine Motor, Dramatic Play A210	Exploratory Fine Motor, Work A211
Grand mean	.96	.04	.05	.03	.04	.01	.04	.01	.01	.00	.02	.01
Sources of variance:												
Ethnicity of												
Caregiver (C)	1.50	.00	.43	1.00	3.20	.00	1.58	.00	.00	--	.00	.00
Primary observer (P)	.50	2.94	.00	.00	.40	4.00	1.58	.00	.00	--	.00	.00
Reliability observer (P)	2.00	1.18	.00	1.00	2.00	2.00	1.05	.00	.00	--	4.00	.00
C × P	2.00	2.94	.00	2.00	.00	2.00	3.16	2.00	.00	--	4.00	5.00*
C × R	.00	.59	.87	.00	.40	.00	.53	2.00	10.00*	--	2.00	5.00*
P × R	.50	.00	.43	.00	.40	2.00	2.63	.00	.00	--	2.00	.00
C × P × R	3.00	.59	.87	.00	.40	.00	.00	.00	.00	--	.00	.00
Pooled residual 1 (CPB, CRB, PRB, CPRB)	.0018	.0014	.0021	.0006	.0022	.0003	.0018	.0005	.0002	.0000	.0005	.0003
Pooled residual 2 (CB, PB, RB, CPB, CRB, PRB, CPRB)	.0020	.0017	.0023	.0010	.0025	[illegible]	.0019	.0005	.0001	.0000	.0005	.0002

*F significant at $p < .05$, all tests done with 1,21 df $\left[.05\ F_{(1,21)} = 4.35\right]$.

Pooled residual 2 was used as the error mean square.

Table 48 (Concluded)

Variables	Music/ Dance, Gross Motor A212	Educational/ Noneducational TV A213	Physical Needs A214	Positive Control A315	Routine Control A316	Negative Control A317	Use of Spanish A418	Interacts-- Infants A419	Interacts-- Older Children A420	Positive Affect A521	Neutral Affect A522	Negative Affect A523
Grand mean	01	.00	.03	.01	.01	.00	.03	.00	.00	.03	.05	.00
Sources of variance:												
Ethnicity of												
Caregiver (C)	--	--	4.55*	.00	.00	--	2.50	.00	.00	1.25	.00	--
Primary observer (P)	--	--	.00	.00	10.00*	--	.00	.00	.00	.63	.00	--
Reliability observer (R)	--	--	.00	.00	.00	--	3.75	.00	.00	.00	.00	--
C × P	--	--	.91	.00	.00	--	.00	.00	.00	3.13	.00	--
C × R	--	--	.91	.00	.00	--	3.75	.00	.00	1.88	1.54	--
P × R	--	--	.00	.00	.00	--	.00	.00	.00	.00	.00	--
C × P × R	--	--	.91	.00	.00	--	.00	.00	.00	.00	.38	--
Pooled residual 1 (CPB, CRB, PRB, CPRB)	.0000	.0000	.0008	.0001	.0002	.0000	.0008	.0001	.0003	.0018	.0026	.0000
Pooled residual 2 (CB, PB, RB, CPB, CRB, PRB, CPRB)	.0000	.0000	.0011	.0001	.0001	.0000	.0008	.0001	.0003	.0016	.0026	.0000

[*] F Significant at $p < .05$, all tests done with 1,21 df $\left[.05\ F_{(1,21)} = 4.35\right]$.

Pooled residual 2 was used as the error mean square.

of within-home interobserver reliability. The first column contains results for the between-observer, across-variable correlations. The remaining columns are results for the absolute value of between-observer differences in relative frequency of each of the 23 adult behavior analysis variables.

The first row of Table 48 reports grand means for each of the variables and provides a useful context for interpretation of the F test statistics reported in the rest of the table. The next seven rows report F test statistics for each of the three fixed main effects, each of their three two-way interactions, and their three-way interactions.

The last two rows of Table 48 report two types of pooled mean square errors for use in testing the fixed effects. Pooled residual 1 is based on the weighted average of all three-way and higher interactions involving the random blocks factor and had 12 degrees of freedom. Pooled residual 2 is based on the weighted average of all interactions involving the random block factor and had 21 degrees of freedom. Use of either pooled mean square required the assumption that the variance components for the sources of variance pooled were zero. A variable-by-variable comparison of the two pooled mean squares indicated that they were nearly equal. Thus, it was reasonable to test the fixed effects using the pooled mean square with the greatest degrees of freedom.

As was hoped, nearly all the F test statistics reported in Table 48 were not significant at $\alpha = .05$ and most were less than 1.0. Of the five significant Fs, four were for variables having a grand mean for observer difference at .01. Thus, these analyses were based on dependent variables with almost no variance. Further, there was no pattern to the non-zero F tests.

Table 49 presents data similar to those reported in Table 47 except that dependent variables were signed differences between observers rather than absolute values of differences. For pairs of observers not of the same ethnicity, differences were formed by subtracting relative frequencies reported by the non-Hispanic observer from relative frequencies reported by the Hispanic observer. Again, the means were near zero, and there was no tendency for the small differences to have a pattern of systematically

Table 49

MEANS OF SIGNED DIFFERENCES BETWEEN PAIRS OF OBSERVERS FOR EACH CELL IN THE RELIABILITY SUBSTUDY

Phase II
(Los Angeles

Caregiver		Hispanic (H)				Non-Hispanic (NH)			
Primary		Hispanic		Non-Hispanic		Hispanic		Non-Hispanic	
Reliability		H	NH	H	NH	H	NH	H	NH
Variable									
A101	Teach	-.02	-.02	.03	.02	.01	-.01	.03	.01
A102	Play/participate, help, direct	.03	.02	-.01	.00	.03	-.03	.01	-.02
A103	Conversation/child	-.01	-.02	.02	-.02	.00	.01	-.03	-.01
A104	Supervise, prepare	.01	.01	.00	.01	.06	-.04	-.06	.02
A105	Conversation/adult	.01	-.01	-.01	.00	.00	.00	.02	.02
A106	Housekeeping, recreation	-.01	.02	-.02	.01	.00	.03	.00	-.03
A107	Out of room	.01	-.02	.00	.00	.00	.00	.02	-.01
A208	Affection	.01	.01	.01	.00	.01	.01	.00	.01
A209	Comfort	-.01	.00	-.01	.00	.00	.00	.00	.00
A210	Language, structured fine motor, dramatic play	.02	.00	-.01	.02	-.01	.00	.00	-.01
A211	Exploratory fine motor, work	-.02	-.01	.01	.00	.00	.00	.02	-.01
A212	Music/dance, gross motor	.01	-.01	.00	.00	.00	.00	-.01	.01
A213	Educational/ noneducational TV	.00	.00	.00	.00	.00	.00	.00	.00
A214	Physical needs	.00	.00	-.02	.00	.06	-.04	.02	.00
A315	Positive control	-.01	.01	-.02	.01	.00	.00	.00	.00
A316	Routine control	.00	.01	-.01	-.01	.00	.01	.01	.02
A317	Negative control	.00	-.01	.00	.00	.00	.00	.00	.00
A418	Use of Spanish	.03	.02	.04	-.03	.00	.00	.00	.00
A419	Interacts--infants	.00	.00	.01	.00	-.01	.00	.00	.01
A420	Interacts--older children	-.01	.02	.00	.00	.00	.00	-.01	.00
A521	Positive affect	.03	-.01	-.03	-.04	.01	.04	.01	-.01
A522	Neutral affect	-.04	.02	.05	.04	.00	-.05	.04	.03
A523	Negative affect	.00	.00	.00	.00	.00	.00	.00	.00

positive (or negative) signs. Of particular interest are the means reported in the second, third, sixth, and seventh columns because they represent pairs of observers not matched in ethnicity. Had the signs of differences tended to agree between the second and third columns or between the sixth and seventh columns, there would have been evidence of observer bias. Such was not the case.

The results reported in Tables 47, 48, and 49 support the conclusion that the observation instrument and training procedures resulted in analysis data that were equally reliable for Hispanic and non-Hispanic caregivers. Further, the results provide no evidence to support an ethnicity of observer by ethnicity of caregiver interaction in the reliability of observations. It was ultimately concluded that ethnicty of observer could be matched with ethnicity of caregiver in future data collection designs related to Hispanics.

Summary of Interobserver Reliability Results

In both Phase I and Phase II, special substudies were designed to check the agreement between observers collecting observation data for analysis. In Phase I, interobserver agreement was estimated for each dimension and each code within the dimensions of the observation instrument. In Phase II, interobserver agreement was estimated for each of the adult and child analysis variables. In both phases, the data allowed the formation of several different indices of agreement. Almost without exception, the behaviors that had reasonable frequency of occurrence were observed by two independent raters in the same way. In Phase I, the child response data were problematic and so this dimension was dropped and is not represented in the substantive analyses that follow. In Phase II, some difficulty was encountered in observers agreeing on the occurrence of positive affect, and this lack of reliability is likely reflected in Phase III data as well.

One of the questions of concern in both Phase II and Phase III data was whether or not ethnic bias existed in the methods of collecting observation data. In Phase I, the focus of concern was on possible differences between Black and White observers; and in Phase II, the focus was on differences between Hispanic and non-Hispanic observers. In each phase, a study was conducted to determine whether interobserver agreement was greater when observers were of matched ethnicity and whether behaviors were coded differently when observers were of the same ethnicity as the caregivers being observed than when they were not. In both the Phase I and Phase II substudies of bias in observations, no evidence was found suggesting that such bias existed. Interobserver agreement was uniformly high across the conditions where ethnicity of observer and observed were matched and where they were not matched. In Phase II, both signal and absolute values of differences between observers in a home were considered and in both cases the average differences were uniformly small regardless of whether observers were of the same ethnicity and whether they were of the same ethnicity as the caregiver being observed.

Stability of Caregiver and Child Data

Thus far, the quality of observation data has been considered from the perspective of the extent to which observers record a given set of behaviors consistently with a criterion or consistently with each other. Because observations are taken for only relatively short samples of time (a few hours for 1 or 2 days), it is also important to have a sense for how these time samples can be generalized. This is a question of the stability over time of behaviors observed.

The more stable the behaviors over time, the more reasonable it is to hold that a description of one time sample is a valid representation of what happens at other times. This section summarizes the findings from several studies of the stability of observed behaviors. In Phase II, all homes were observed for 2 consecutive days, allowing a comparison of behaviors across those 2 days. In Phase III, a subsample of homes were observed on each of 2 days separated by 4 weeks. This substudy allowed for consideration of behavior stability over a much longer period of time. Finally, we combined Phase II and III data to investigate the stability of behavior across hours within a single day. The findings of these three efforts to estimate stability are described in the following three sections.

Stability Across Two Adjacent Days

The Phase II design afforded an investigation of stability across adjacent days in that all but 3 of the 99 homes were observed on each of 2 adjacent days. After the booklets describing structured settings were deleted, data for each of the 23 adult variables were aggregated to the day level. Use of a 2 days by 96 homes analysis of variance, enabled us to estimate the variance components necessary to describe the day and average across days generalizability coefficients for each of the 23 variables. For purposes of analyses, the average across-days coefficients are of interest, because that is how the analysis variables were defined. For future decisions about the possibility of using only 1 day of observation per home, the single day coefficient was of interest.

Table 50 presents the two types of coefficients for each of the 23 adult behavior variables. The average across-days coefficient is defined as:

$$r_1 = \frac{M_{SH} - MS_{DH}}{MS_H} ,$$

where H denotes homes and D denotes days. The single-day coefficient is defined as:

$$r_2 = \frac{MS_H - MS_{DH}}{MS_H + MS_{DH}} .$$

When interpreting the results reported in Table 50, it is useful to remember that stability across days is most important in understanding correlations between continuous variables defined on homes. These correlations can be substantially attentuated by low stability across days for one or both variables. For analyses comparing means across categories of nominal scale variables--such as ethnicity of caregiver--low stability across days is somewhat less of a problem. This is because aggregating across homes can be thought of as aggregating across days as well.

Table 50

FIELD DATA STABILITY ACROSS TWO ADJACENT DAYS

Phase II
(Los Angeles)

Variable Number	Variable Name	Stability Coefficients	
		For Single Day of Observation	For Average Two Days of Observation
A101	Active involvement with children--teach	.428	.600
A102	Active involvement with children--play/participate, help, direct	.520	.685
A103	Active involvement with children--conversation	.334	.500
A104	Passive involvement with children--supervise, prepare for children	.423	.612
A105	No involvement with children--conversation with adult	.334	.500
A106	No involvement with children--housekeeping, recreation	.658	.794
A107	No involvement with children--out of room	--	--
A208	Facilitates prosocial behavior, affection	--	--
A209	Facilitates comfort	--	--
A210	Facilitates intellectual (language/information; fine motor, structured; dramatic play)	.334	.500
A211	Facilitates fine motor activity, exploratory; work	1.000	1.000
A212	Facilitates music/dance, gross motor activities	.500	.667
A213	Facilitates educational or noneducational TV	--	--
A214	Facilitates physical needs	.400	.572
A315	Positive control measures	--	--
A316	Other routine controls	1.000	1.000
A317	Negative control	--	--
A418	Use of Spanish	.922	.960
A419	Interacts with infant(s)	.637	.778
A420	Interacts with older children	.334	.500
A521	Affect--positive	.429	.600
A522	Affect--neutral	.640	.781
A523	Affect--negative	--	--

Seven of the adult behavior analysis variables in Table 50 had undefined stability coefficients. Three of the seven had zero frequency of occurrence (Table 44)--comfort, negative control, and negative affect. The remaining four--out of range, facilitate prosocial, facilitate television and facilitate positive control--had low frequency of occurrence that did not vary across homes. The stability coefficients across days for these variables would not be appreciably increased by additional days of observation; thus, they are reported in Table 50 simply with dashes. For the remaining 16 variables, stability coefficients for data aggregated across days are all .5 or higher. Three of the variables have stability coefficients of nearly 1.0: facilitates exploratory fine motor activity and work, other routine controls, and use of Spanish.

The single-day stability coefficients were necessarily lower. For the 16 defined stability coefficients, the average single-day coefficient was .56 as opposed to an average of .63 for aggregated data. This average increase of .07 is a slight underestimate in that three variables had nearly perfect stability for a single day.

In summary, where variance across homes was present, analysis variables were at least as stable as might be expected. For 10 of the 23 variables, there was little additional utility in a second day of observation. Six of the 10 variables simply did not occur, and 3 had nearly perfect stability for a single day. For the remaining 13 variables, the second day of observation had modest utility, increasing stability by about .10.

Stability Across Two Days Separated by Four Weeks

In Phase III, a special substudy was conducted to investigate the stability of adult variables across 2 half-days of observation separated by 4 weeks. Caregiver behaviors were observed in 20 homes for 2 half-days separated by 4 weeks plus or minus 2 days. All homes were in San Antonio. Fifteen of the homes were regulated, seven were White, two Black, and six were Hispanic. The remaining five homes were unregulated and Hispanic. For each home, the same observer was used at each time point. There were six observers, who observed two to four homes each.

In the original design, homes were evenly distributed across caregiver ethnicity and home status (with the exception of White/regulated, which did not exist in San Antonio). Unfortunately, the homes for the substudy had to be selected from among the first homes observed so that the second observation could be collected near the end of the data collection period for the site. If this had not been done, the cost of the study would have been prohibitive because trainers would have been required to return to the site to make certain that observers were still able to code reliably.

The actual design represented the variety of homes available within the first 3 weeks of observation in the site. Based on Phase II results, it can be assumed that observers code behavior with equal reliability across home types. It is reasonable to conclude that the restricted nature of the homes in the Phase III stability study would tend to yield a set of homes more homogeneous on caregiver behaviors than if the original design had been implemented. This in turn should tend to yield slightly lower stability estimates.

The study was a compromise according to existing resources in other ways as well. We would have preferred to study both Phase III sites, both caregiver and child observation variables, more than two points in time, and a larger sample of homes. Costs were substantially reduced by keeping the stability study within a single site. Because of its Hispanic population, San Antonio was selected over Philadelphia.

Because in Phase III data collection efforts different observers were used for caregiver and child observations, the number of additional days of observation was halved by the decision to study only caregiver variables. Caregiver variables were given preference because they have a more direct bearing on the policy questions of interest. The number of additional days of observation required depended directly on the number of time points to be studied. Two time points are, of course, the minimum, and two were used. Finally, 20 homes seemed to be a minimal sample size for providing a reliable estimate of stability coefficients.

The stability coefficients of interest were for the total sample, as opposed to within levels of design variables, since substantive analyses were done on the total sample. The design was, therefore, 20 homes by two points in time. For each of the 48 composite variables used in Phase III to describe caregiver behaviors, a homes-by-times analysis of variance was used to estimate the appropriate variance components. Because the main data base for Phase III consisted of a single half-day of observation for caregiver behaviors, the stability coefficients of primary interest were for data on a single half-day of observation.

The stability coefficients from the Phase III substudy are reported in Table 51. The first column indicates the particular caregiver variables. The second and fourth columns contain the stability coefficients based on 1 and 2 days of observation, respectively. Nearly half the variables (40%) had 1-day stability coefficients across 4 weeks of .6 or higher. Only 14 of the variables had 1-day stability coefficients of less then .4. In general, it can be concluded that not only was the quality of observations high, but also caregiver behavior in day care homes was in fact stable over time.

The 14 variables that had low stability were also among the least frequently occurring variables. Nevertheless, other variables that had similar low frequencies of occurrence were found to be stable. Eight of the 14 variables came from the behaviors: directs, converses, facilitates work, and controls. For directs and work, the totals were reasonably stable but the variables for Focus Child 1 and Focus Child 2 were not. The total for converses was not stable, however, and no explanation can be given for the finding that the Focus Child 2 variable was stable. Of the three control variables, only the one dealing with antisocial situations had stability and it was modest (.5). Other problematic variables were out of range, comfort, music/dance, and negative affect.

As mentioned previously, stability coefficients for caregiver behaviors were estimated in Phase II based on two adjacent half-days of observation. The hypothesis was that those stabilities were high in large part because the two points in time were so close. Columns 3 and 5 of Table 51 contain the stability coefficients from Phase II based on 1 and 2 half-days of observation, respectively. As stated earlier, only 12 of the 23 Phase II analysis variables were also used in Phase IV; thus, comparison of the two stability study results are limited to that set of common variables.

Table 51

FOUR WEEK STABILITY COEFFICIENTS FOR CAREGIVER COMPOSITE VARIABLES

Variable Number	One Day of Observation		Two Days of Observation		Average Hour-to-Hour Correlation
	4-Week Lag	1-Day Lag	4-Week Lag	1-Day Lag	
1. Teaches C1 (Focus Child 1)	.795		.886		.644
2. Teaches C2 (Focus Child 2)	.564		.721		.646
3. Teaches--total	.857	.428	.923	.600	.507
4. Plays/participates with C1	.600		.750		.619
5. Plays/particilates with C2	.087		.160		.371
6. Plays/participates--total	.556		.714		.260
7. Helps C1	.684		.813		.431
8. Helps C2	.882		.938		.388
9. Helps--total	.600		.750		.278
10. Directs C1	.037		.071		.679
11. Directs C2	.200		.333		.759
12. Directs--total	.538		.700		.644
13. Converses with C1, not negative	.000		.000		.685
14. Converses with C2, not negative	.667		.800		.613
15. Converses--total	.000	.334	.000	.500	.617
16. Supervises and prepares for children	.506	.423	.672	.612	.404
17. Converses with another adult	.687	.334	.814	.500	.317
18. Involved in housekeeping	.796		.887		.529
19. Involved in recreational activity	.780		.876		.483
20. Not involved (out of range or room)	.000		.000		.358
21. Facilitates prosocial behavior with any children	.600		.750		.444
22. Facilitates affection with any children	.400		.571		.370
23. Facilitates comfort with any children	.200	.000	.333	.000	.105
24. Facilitates language/ information with C1	.643		.783		.529
25. Facilitates language/ information with C2	.526		.670		.516
26. Facilitates language/ information--total	.800		.889		.330
27. Facilitates structured fine motor with C1	.429		.600		.304
28. Facilitates structured fine motor with C2	.889		.941		.281
29. Facilitates structured fine motor--total	.490		.658		.194

Table 51 (Concluded)

Variable Number	One Day of Observation		Two Days of Observation		Average Hour-to-Hour Correlation
	4-Week Lag	1-Day Lag	4-Week Lag	1-Day Lag	
30. Facilitates dramatic play--total	.600		.750		.178
31. Facilitates exploratory fine motor with any children	.333		.500		.219
32. Facilitates work with C1	.333		.500		.329
33. Facilitates work with C2	.000		.000		.530
34. Facilitates work--total	.455		.625		.241
35. Facilitates music/dance--total	.111		.200		.042
36. Facilitates gross motor activities with any children	.418		.589		.206
37. Facilitates TV with any children	.808	.000	.894	.000	.307
38. Facilitates physical needs with C1	.640		.780		.268
39. Facilitates physical needs with C2	.750		.857		.368
40. Facilitates physical needs--total	.629	.400	.772	.572	.225
41. Interacts with a baby	.593	.637	.745	.778	.565
42. Interacts with a school-aged child	1.000	.334	1.000	.500	.834
43. Expresses positive affect	.778	.429	.875	.600	.627
44. Expresses negative affect	.000	.000	.000	.000	.281
45. Controls--total	.676		.806		.468
46. Controls dangerous situation	.000		.000		.278
47. Controls antisocial situation	.500		.667		.308
48. Strictly controls any children	.000	.000	.000	.000	.285

Surprisingly, only 2 of the 12 variables were more stable across two adjacent time points than across two time points separated by 4 weeks. There were, however, several differences between the two data sets in addition to the difference in lag time. Probably of greatest importance was that in Phase II, when observations of caregiver were alternated with observations of focus children, whereas in Phase III, observations of caregiver behavior were continuous for a half-day. Thus, each half-day of observations of caregivers for the Phase II stability study was based on approximately half as many frames of observation as each half-day of observation in Phase III.

Because all homes in Phase II (Los Angeles) were observed for 2 half-days, the data set for analysis was the sum across the 2 half-days. This was not the case for Phase III data (San Antonio and Philadelphia). Thus, when describing the stability of analysis variables, it is appropriate to report 2-day stability coefficients for Los Angeles (column 5 of Table 51) and 1-day stability coefficients for the other two sites (column 2 of Table 51). The 4-week lagged data still tended to be more stable, although less so. Perhaps by separating the observation of caregivers from the observation of focus children, observers were able to improve the reliability of their coding. This was, of course, a motivation for making the change in the observation procedures between Phase II and Phase III. The real point, however, is that for the most part caregiver behaviors were stable over a 4-week period (and apparently as stable as they were across 2 adjacent days).

Hour-to-Hour Correlations of Observation Data

Because the observation data were collected by observation book, with one observation book of data per hour, it was possible to consider the stability of data across hours within a day. In Phase III, a single hour of data yielded 120 discrete observations. For caregiver behavior, there were generally 3 hours of observation of behavior in the natural setting. The same was true for child observations; however, ideally these observations were evenly divided between a Focus Child 1 and a Focus Child 2. The exception was for homes where no children were in the age ranges defining either a Focus Child 1 or a Focus Child 2. For homes where neither focus child was present, all observations were on a single focus child. Thus, in general, the child observation data in Phase III are based on 180 discrete observations and the caregiver data are based on 360 discrete observations.

In Phase II, a single hour of observation yielded 90 discrete observations divided evenly between the caregiver and the two focus children. There were 3 hours of observation in natural situations for each of 2 days. Thus, Phase II caregiver observations are based on 270 frames of data per day. When both focus children were present, child data were based on 135 frames of data. When interpreting hour-to-hour intercorrelations, however, it is important to keep in mind that within any 1 hour, two-thirds of the observations were on one focus child. The focus child most observed was alternated from hour to hour so that, across the 6 hours, the two focus children received equal emphasis.

The sixth column of Table 51 contains the average hour-to-hour intercorrelations for each of the 48 caregiver analysis variables based on both Phase II and Phase III data. Thirty-four of the 48 variables had average hour-to-hour intercorrelations of .3 or higher. Many of these average correlations were as high as .6.

Hour-to-hour intercorrelations should be interpreted as one indication of the reliablity of observation data for a single hour. Although none of the substantive analyses is based on single hours of observation, it is interesting to note that for many of the caregiver variables, a single hour of observation would have yielded reliable data. This is particularly true for teach, directs, converse, housekeeping, language/information, interaction with infant or school-age child, and positive affect.

For these variables, caregiver behavior is consistent from hour to hour within a morning. Caregiver behavior was least consistent across time within a day on providing comfort, structured fine motor, dramatic play, and music/dance. The variables comfort, dramatic play, and music/dance were low frequency variables and, at least for the latter two, it is reasonable that if they were to happen at all during the observation period, it would be only within one of the hours of observation. Thus the low hour-to-hour correlations for these variables seem reasonable.

The hour-to-hour intercorrelations can also be used to estimate the reliability of observation data for the full period of observation. The Spearman-Brown formula is a way of estimating the reliability of observation if the amount of observation time were increased in multiples. Because the average hour-to-hour intercorrelation indicates reliability for a single hour, the full period of observation (3 hours) represents a multiple of three.

Table 52 shows the reliability of 3 hours of observation (column 2), estimated from selected values of reliability for a single hour of observation. For example, if the average hour-to-hour intercorrelation were .3, the reliability of 3 hours of observation would be .563. Using the information in Table 52, it is possible to estimate from within-day stability the reliability of the 48 caregiver analysis variables for a half-day of observation as used in Phase III. On the basis of the substudy of 20 homes in Phase III, these reliabilities were also estimated based on stability across two 3-hour periods of observation separated by 4 weeks (as discussed earlier and reported in column 2 of Table 51). For some of the caregiver variables, the reliabilities for a single 3-hour period of observation were also estimated on the basis of stability across 2 adjacent days (as discussed earlier and reported in column 3 of Table 51).

Table 52

SPEARMAN-BROWN ESTIMATES OF THE RELIABILITY
OF THREE HOURS OF OBSERVATIONS

Single Hour	Three Hours
.1	.250
.2	.429
.3	.563
.4	.667
.5	.750
.6	.818
.7	.875

Unfortunately, across the three ways of estimating the reliability of 3 hours of observation, both the sample and the hourly observation schedule varied somewhat. If this had not been the case, the three estimates could be used straightforwardly to say which variables were most stable within a day, next most stable across 2 adjacent days, and least stable across 2 days separated by 4 weeks. Although it may seem reasonable to believe that the closer in time two sets of observations are, the more consistent behavior will be across those times, as just suggested, this need not be the case. An activity of short duration that occurs once each day might well yield higher stability between days than between hours within a day.

For 29 of the 48 variables, within-day stability for 3 hours of data was higher than stability across 2 days separated by 4 weeks. For an additional six variables, virtually no difference existed between the two types of stability. Thus, for 73% of the variables, there was the predicted finding that behaviors close in time are more alike than behaviors separated by several weeks. For 13 caregiver variables, however, within-day stability was less than stability across 4 weeks. Eight of these 13 variables were totals; that is, distinctions were not made between focus children. These variables were teach, play/participate, help, language/information, structured fine motor, dramatic play, TV, and physical needs. In the case of physical needs, all three variables had lower stability within a day.

Although these findings might be explained away on the grounds that the two types of stability coefficients are based on different samples, one must also recognize that, for most of the variables, within-day stability was highest (as expected). The more reasonable interpretation seems to be that the caregivers tend to exhibit these 13 behaviors in more consistent amounts across days than across hours within days. At least for some of the variables, this interpretation makes sense. Physical needs may be attended to with greatest frequency when children first arrive, such as helping them take off their outdoor clothing. This would be expected to happen every day but not every hour within the day. The explanation for dramatic play might be somewhat different. Conceivably, a particular time is set aside for dramatic play (if it is to occur at all), but more likely dramatic play occurs spontaneously but lasts for only a short time. Thus, dramatic play would tend to fall into only one of the hour periods within a day but might happen once in most days. The explanation for television might be similar to the notion of a scheduled time because television is programmed in that way. For example, each day children might watch Sesame Street but little else. This would create stability across days but not within days.

For 11 of the 12 variables on which within-day stability could be compared with stability across 2 adjacent days, the within-day stability was greater. The single exception was for total physical needs, and even for this variable the across-days stability was only marginally higher than the within-day stability.

Hour-to-hour correlations can also be used to estimate the stability of child behaviors. Again, average hour-to-hour correlations based on 3 "hours" worth of data were used. Because these periods were divided evenly between Focus Child 1 and Focus Child 2 (at least for most homes), an "hour" of observation actually represents only a half-hour of observation of any one focus child. As mentioned previously, this problem is compounded in Phase II data because within any 1 hour, one or the other of the focus children was observed only one-third of the time. The main point is that "hour" data for focus children are likely to be less stable than "hour" data for caregivers because those data are based on approximately half as many discrete observations.

The average hour-to-hour intercorrelation for the 28 child variables is reported in Table 53. Column 2 contains stability estimates for a single "hour" of observation on Focus Child 1, and column 3 contains comparable estimates for Focus Child 2. These stability estimates range from .6 to virtually zero. Using .3 or higher as a criterion, 10 of the 28 variables for Focus Child 1 and 9 of the 28 variables for Focus Child 2 exceeded this mark. The stability coefficients for a variable tended to be similar across the two focus children. For example, 7 of the 9 variables for Focus Child 2 that had 1-hour stability of .3 or higher also exceeded that criterion for Focus Child 1.

The variables that were most stable within a day were seeks attention, dramatic play, fine motor exploratory alone, variables concerning television, controlling a young child, being controlled by the caregiver, and the four totals (monitoring, alone, with other children, and with caregiver). Using the Spearman-Brown formula, these variables have reliabilities of about .6 based on the full period of observation.

Table 53

AVERAGE HOUR-TO-HOUR STABILITY INTERCORRELATIONS FOR CHILD VARIABLES

Variable	Focus Child 1	Focus Child 2
1. Prosocial	.117	.117
2. Affectionate	.170	.098
3. Distress	.115	-.016
4. Seeks attention	.401	.362
5. Dramatic play	.355	.255
6. Looks at book	.080	.119
7. Language/information	.201	.166
8. Fine motor, structured	.218	.186
9. Fine motor, exploratory (alone)	.388	.476
10. Fine motor, exploratory (young child)	.157	.304
11. Fine motor, exploratory (caregiver)	.276	.120
12. Work	.301	.137
13. Music/dance	.032	.050
14. Gross motor	.273	.147
15. TV alone	.594	.366
16. Educational TV with someone	.255	.243
17. Noneducational TV with someone	.276	.122
18. Physical needs alone	.027	.007
19. Physical needs (caregiver)	.141	.025
20. Conversation (young child)	.057	.186
21. Conversation (caregiver)	.267	.164
22. Antisocial (young child)	.045	.162
23. Controls (young child)	.329	.370
24. Controlled (caregiver)	.261	.311
25. Monitoring (total)	.306	.650
26. Alone (total)	.482	.350
27. With other children (total)	.428	.391
28. With caregiver (total)	.300	.260

Because the substantive analyses were based on data from the full period of observation, the data seem adequate for these variables. The most problematic variables from the perspective of within-day stability were music/dance and physical needs alone. At least for music/dance, between-day stability might well have been higher. For the remainder of the 28 variables, single-hour stabilities ranged from .1 to .25. Using the Spearman-Brown formula, the single hour stabilities translate into reliabilities for the variables as used in substantive analyses of .2500 to about .5.

Morning-to-Afternoon Stability

In Phase III, a subsample of homes was selected for observation in the afternoon. The original design specified afternoon observations in 16 homes in San Antonio and 12 homes in Philadelphia. Two homes were to be selected from each cell in the main study design with the further stipulation that the homes have school-age children present. The purpose of this substudy was to compare and contrast caregiver and child behaviors between the morning when school-age children were rarely present and the afternoon, when more school-age children were present. In a sense, the study was designed to determine the stability of behaviors across the two times of days and two different compositions of children in care.

Nine of the 16 homes in San Antonio were observed in the afternoon, but only 3 of the 12 homes in Philadelphia were observed in the afternoon. In both sites, caregivers resisted granting the requested increase in observation time. In Philadelphia, there was the added complication that most homes did not provide afternoon care. The total sample for the contrast of mornings to afternoons was 12 homes. In San Antonio, observations were made in four Hispanic homes, two licensed and two unlicensed; four White homes, two licensed and two unlicensed; and one Black home, licensed. In Philadelphia, all three homes were Black, two licensed and one sponsored.

Table 54 provides a summary of how the composition of the homes changed from morning to afternoon. As can be seen in the second column of Table 54, on the average a home had 4.7 children present in the morning. Just under half were female, the average age was nearly 3 years, and the ethnic composition was roughly evenly divided among Black, White, and

Table 54

COMPARISON OF MORNING AND AFTERNOON COMPOSITION OF HOMES

Phase III
(San Antonio and Philadelphia, combined)

Characteristics	Morning	Afternoon	Difference	t
Total number of children	4.667	7.333	-2.667	-3.33*
Less than 12 months of age	.333	.333	.000	.00
12-35 months of age	2.417	2.333	.083	.56
36-59 months of age	1.500	1.500	.000	.00
59^+ months of age	.417	3.167	-2.750	-3.53*
Average age of children	34.924	55.190	-20.266	-5.41*
Standard deviation of age	16.577	31.124	-14.553	-4.89*
Percentage of female	.458	.463	-.005	-.07
Percentage Black	.286	.289	-.003	-1.00
Percentage White	.414	.422	-.007	-.33
Percentage Hispanic	.300	.290	.010	.43

*Significant at .05.

Hispanic. This profile for the 12 homes is nearly identical to that for the total sample of 246 homes. The major exception is that the sample of 12 homes had on the average nearly one more child present in the mornings than did the total sample.

The main purpose of Table 54 is to depict how the composition of homes changed from morning to afternoon. The entries in column 4 are the means on a variable for afternoon data subtracted from the mean on the same variable for morning data. The fifth column presents the paired t test statistic based on 11 degrees of freedom. The only significant changes from morning to afternoon were for total number of children, number of children age 59 or more months old, average age of child, and standard deviation of child ages. These changes form a simple pattern. The number of children in the home increased by nearly three because of an influx of older children. This, in turn, increased the average age by 20 months and the standard deviation of ages. In short, home composition was stable from morning to afternoon except for a sharp increase in the number of older children.

The issue remaining is to determine the impact of an increased number of older children on the behaviors of the caregiver and the two focus children. Table 55 presents a summary of the morning-to-afternoon comparisons of caregiver behavior and is similar in layout to Table 54. The data in columns 4 and 5 indicate considerable stability between morning and afternoon for caregiver behavior. Given the previous discussion, the expected increase occurred in the frequency with which the caregiver interacted with a school-age child. This variable was one of only two for which a significant increase in frequency occurred from morning to afternoon. To offset the caregiver's increased attention to school-age children, significant decreases occurred in caregiver teaching, directing, and providing language/information to Focus Child 2 and in total conversation, housekeeping, and comforting. The pattern appears to be that caregivers forego some interaction with the 36- to 59-month-old children as a result of spending more time with the school-age children.

Table 56 summarizes the results for child behaviors. The first five columns contain data for Focus Child 1, and the last four columns contain data for Focus Child 2. Few of the morning to afternoon comparisons were significant. Focus Child 2 interacted less with the caregiver, a result

Table 55

COMPARISON OF MORNING AND AFTERNOON CAREGIVER BEHAVIORS

Phase III

Variable	Morning	Afternoon	Difference	t
Teaches C1 (Focus Child 1)	.020	.039	-.019	-2.01*
Teaches C2 (Focus Child 2)	.039	.011	.028	2.62†
Teaches - total	.117	.070	.047	1.53
Plays/participates with C1	.013	.014	-.001	- .27
Plays/participates with C2	.011	.004	.007	1.46
Plays/participates - total	.054	.092	-.039	-1.47
Helps C1	.057	.041	.017	.81
Helps C2	.011	.009	.002	.67
Helps - total	.114	.090	.024	1.02
Directs C1	.004	.006	-.001	- .93
Directs C2	.014	.007	.007	2.22†
Directs - total	.034	.031	.003	.71
Converses with C1	.007	.007	.001	.92
Converses with C2	.007	.004	.003	1.05
Converses - total	.023	.015	.008	4.30†
Supervises/prepares	.179	.180	-.001	- .04
Converses with other adult	.089	.089	-.000	- .00
Housekeeping	.210	.128	.082	2.92†
Recreation	.099	.081	.019	1.29
Out of range	.005	.005	-.000	- .02
Facilitates prosocial	.012	.014	-.002	-.031
Facilitates affection	.012	.017	-.005	-1.43
Facilitates comfort	.008	.003	.006	1.86*
Facilitates language/ information - C1	.010	.020	-.011	-1.29
Facilitates language/ information - C2	.022	.004	.018	2.14*
Facilitates - total	.062	.033	.030	1.28
Structured fine motor - C1	.002	.010	-.007	-1.71
Structured fine motor - C2	.013	.003	.010	1.47
Structured fine motor - total	.031	.023	.007	.58
Dramatic play	.007	.002	.005	.84
Exploratory fine motor	.010	.009	.001	.11

Table 55 (Concluded)

Variable	Morning	Afternoon	Difference	t
Works with C1	.000	.001	-.001	- .84
Works with C2	.003	.002	.001	.79
Work - total	.010	.007	.003	.98
Music/dance	.001	.001	.000	.00
Gross motor	.024	.014	.010	.93
TV	.025	.068	-.043	-1.59
Physical needs - C1	.052	.035	.017	.79
Physical needs - C2	.010	.007	.003	.90
Physical needs - total	.108	.081	.026	.93
Interacts with baby	.044	.036	.007	.061
Interacts with school-age child	.000	.157	-.157	-6.22≠
Positive affect	.049	.073	-.024	-1.23
Negative affect	.002	.000	.001	1.39
Controls - total	.035	.040	-.005	- .69
Controls dangerous situation	.003	.002	.001	.30
Controls antisocial behavior	.004	.003	.001	.39
Strictly controls	.001	.001	.000	.043

*Significant at .10.

⌿Significant at .05.

≠Significant at .01.

Table 56

COMPARISON OF MORNING AND AFTERNOON CHILD BEHAVIOR

Variable	12 to 35 months				36 to 60 months			
	Morning	Afternoon	Difference	t	Morning	Afternoon	Difference	t
Prosocial	.0036	.0031	.0005	.19	.0070	.0025	.0045	1.19
Affectionate	.0067	.0113	-.0046	-.79	.0006	.0000	.0006	1.00
Distress	.0036	.0103	-.0067	-1.54	.0028	.0000	.0028	1.51
Seeks attention	.0108	.0087	.0021	.34	.0044	.0009	.0035	1.12
Dramatic play	.0005	.0006	-.0001	-.12	.0112	.0300	-.0188	-.69
Looking at book	.0030	.0000	.0030	1.00	.0006	.0016	-.0010	-.92
Language/information	.0056	.0045	.0011	.56	.0143	.0036	.0106	1.81
Fine motor, structured	.0179	.0325	-.0146	-.62	.0678	.0835	-.0157	-.42
Fine motor, exploratory								
Alone	.2607	.3026	-.0418	-1.33	.1249	.1169	.00[illegible]9	.17
With young child	.0010	.0028	-.0018	-1.00	.0023	.0012	.0011	.57
With caregiver	.0016	.0005	.0011	1.04	.0100	.0035	.0[illegible]6	1.21
Work	.0000	.0000	.0000	.00	.0019	.0011	.0008	.78
Music/dance	.0005	.0053	-.0048	-1.28	.0000	.0000	.0000	.00
Gross motor	.1464	.1018	.0445	1.52	.1221	.0884	.0338	1.23
TV alone	.0602	.0126	.0476	1.40	.0135	.0354	-.0219	-1.04
Educational TV with someone	.0628	.0000	.0628	2.33†	.0312	.0046	.0266	1.83
Noneducational TV with someone	.0105	.0261	-.0156	-1.78	.0095	.0895	-.0800	-2.43†
Physical needs alone	.1324	.1497	-.0172	-.29	.1689	.0740	.0949	3.49‡
Physical needs with caregiver	.0577	.0410	.0168	1.23	.0257	.0140	.0117	.86
Conversation with young child	.0010	.0000	.0010	1.00	.0065	.0000	.0065	2.06*
Conversation with caregiver	.0022	.0006	.0016	1.48	.006[illegible]	.0031	.0029	1.92*
Antisocial young child	.0038	.0010	.0027	1.79	.0035	.0021	.0023	1.17
Controls young child	.0006	.0000	.0006	1.00	.0029	.0040	-.0010	-.55
Controlled by caregiver	.0206	.0096	.0110	1.16	.0365	.0225	.0140	.92
Monitor - total	.0951	.0777	.0174	1.37	.0632	.0635	.0003	-.01
Alone - total	.6674	.7247	-.0573	-.88	.5559	.4864	.0694	.81
With other children - total	.0089	.0059	.0030	.90	.0369	.0146	.0223	1.71
With caregiver - total	.1124	.0796	.0327	1.48	.1030	.0476	.0554	2.85

*Significant at .10.

†Significant at .05.

‡Significant at .01.

consistent with the caregiver behavior data. A shift in television viewing away from education programs also occurred.

In summary, the number of school-age children markedly increased from morning to afternoon in the 12 homes studied. This increase did not seem to be associated with any marked shifts in caregiver or focus child behavior. However, a pattern of results indicated that caregivers tended to replace some of their attention to Focus Child 2 children with attention to school-age children.

Difficulties in the Analysis

The analysis of large, complicated data sets is difficult and expensive. The observation data set described here is no exception. It is, therefore, appropriate to comment on a few difficulties that would be well to keep in mind when interpreting our results. First, although we performed no systematic investigation of the distributional shapes of the observation variables, there seems little doubt that they were positively skewed to some extent. Because most variables were derived by summing over several observation code patterns and because all variables were created by summing over frames, however, the skew is probably not dramatic. This aspect of the data does not affect the descriptive statistics reported because they are free from distributional assumptions, although it is true that the strength of any curvilinear relationships would be underestimated with our use of linear models. The hypothesis tests conducted do make distributional assumptions, however, and their validity may have been affected by the positive skew of the observation variables. Some transformation might have been used--for example, a log transformation--to adjust for the positive skew and to improve the validity of the hypothesis tests reported. Because of time and expense, this was not done. It should be kept in mind that even had transformations been used, hypothesis tests were so numerous and interdependent that the statements of significance they yield can only be used as a crude sorting rule for deciding on which relationships should be given most attention. For comparative purposes, it is also worth mentioning that none of the other major studies of observation data have used adjustments to correct for skewed distributions.

A second difficulty with the analysis concerns colliniarity among the independent variables. Colliniarity among independent variables produces beta weights with large standard errors. The concern for colliniarity motivated the reporting of the correlation matrix of independent variables in Table 24. As seen there, only a few pairs of independent variables were correlated .25 or more. Nevertheless, the few high intercorrelations did affect the standard errors of beta weights. The hypothesis tests, crude as they are, are helpful here because the standard errors of beta weights reflect the lack of stability due to colliniarity. The tests of significance are appropriately conservative. In that sense, then, confidence can be placed in significant beta weights.

A third difficulty with data analysis concerns lack of stability in the observation data. The stability of observation data across adjacent days, 2 days separated by 4 weeks, hour to hour, and observer to observer are reported and, in general, the data were found to be quite stable. To the extent that data were not stable, however, correlations between independent variables and observation data are attenuated. Except for lack of stability across observers, this attenuation to correlations between independent and dependent variables seems appropriate. For example, we are not interested in knowing the strength of relationship between caregiver education and caregiver behavior if it were stable. We are interested, instead, in knowing the extent to which a correlation exists given the lack of stability of caregiver behavior. Lack of stability across observers, however, is a function of our measurement procedure rather than the variables under investigation. Had the data been available, it would have been well to correct our analyses for lack of observer stability. Given the results reported in this chapter, these corrections would have made only modest differences since there was high interobserver agreement.

Summary

Throughout all phases of the study, considerable attention was given to the quality of observation data. In the Phase III analysis, we profited in many ways from changes in the definitions and intruments based on results of earlier work. This chapter begins by providing the factor analytic results from which the analysis variables were created. These results indicate that the several specific behaviors summed to create the composite analysis variables were internally consistent and distinct from specific behaviors used to define other composite analysis variables. As a result, 48 caregiver and 28 Focus Child 1 and Focus Child 2 variables were created for use in substantive analyses.

In the second section of this chapter, the results of three criterion videotape studies are summarized. In all cases, observer agreement with criterion codes was high at the end of training. In fact, observers were not used unless they met or exceeded the criterion of 80% agreement overall. Further, in both Phase II and Phase III data, the data on which the substantive analyses of this report are based, the observer agreement with the criterion videotape increased after 2 or more weeks of field observation.

The third section of this chapter reports the results of Phase I and II studies of interobserver agreement. In Phase I, several indices of interobserver agreement were used to report the code and dimension reliability of adult and child data. In general, interobserver agreement was high, although some of the low frequency behaviors were problematic. In Phase II, interobserver reliability was reported at the level of analysis variables. We made two attempts to uncover any ethnic bias in the observation data. In Phase I, the focus was on contrasts between Black and White observers and Black and White caregivers. No evidence of ethnic bias was found. In Phase II, attention shifted to comparisons of Hispanic and non-Hispanic caregivers and observers. Again, no evidence of ethnic bias was found.

The fourth section of this chapter reports three separate studies of behavior stability. A Phase II study indicated that most of the caregiver analysis variables that occurred with fair frequency were stable across 2 adjacent days. In fact, the stability coefficients were surprisingly high for those familiar with similar studies of school teacher behaviors, where the setting is even more structured and behaviors presumably more structured and predictable.

In Phase III, a study was conducted of stability across 2 days separated by 4 weeks. Surprisingly, these stability coefficients were generally higher than those for 2 adjacent days. The explanation may lie with the improvements in instrumentation that were made between Phase II and Phase III.

Finally, in the fourth section, hour-to-hour correlations within a day are reported for both caregiver and child data. Once again, the caregiver variables were found to be stable. As might be expected, however, the many child variables were substantially less stable than the caregiver variables. Some difficulty may arise in predicting child behaviors using independent variables that vary continuously across homes, such as, age mix variables and number of children in the home.

The last section of this chapter compares home composition and caregiver and child behaviors between the morning and afternoon of a single day for 12 homes in Phase III. Although the sample was small, it was judged representative of the larger data base and the findings were clear. More school-age children were present in the afternoons. (It was a requirement of the design that school-age children be present in the afternoon, so this was not surprising). No large shifts occurred in either caregiver or focus child behaviors, however. Caregivers tended slightly to shift their attention away from Focus Child 2 children to meet the demands of school-age children.

VIII ANALYSIS AND RESULTS

This chapter presents the results of the analyses performed on the data described in Chapter VII. These data describe family day care homes and answer the six primary study questions presented in Chapter I. The data were obtained from the natural and structured observations of caregivers and children, from observers' logs, and from summary observation checklists of the physical environment, nutrition, and affective climate of the home. Descriptive as well as more complex statistical techniques were used in analyzing these data. Relationships between structured and natural situations and between adult and child behaviors were examined. Regression analysis was used to test differences in the frequency of occurrence of caregiver and child behaviors in a variety of settings defined by regulatory status, ratio of children to adults, age mix of children, education and experience of caregivers, ethnicity of caregivers, and geographical location.

This chapter discusses results in the following order:

- o Overall description of caregiver and child behavior in day care homes as observed in the natural situation.
- o Description of the relationship among the dependent variables (caregiver and child behaviors) and the independent variables (site and caregiver home characteristics).
- o Comparison of caregiver behaviors in structured and natural situations.
- o Description of homes as rated by the Physical Environment and Nutrition Checklists and the Observation Summary.
- o Description of outlying homes, for example, the homes that had the most positive or negative affect.

Overall Description of Family Day Care Homes

The principal purpose of the observation component of the NDCHS was to describe family day care homes. Questions addressed were what kinds of environments the caregivers provide, whether family day care homes provide a reasonable environment for children, what type of care the children receive, and whether it is a positive experience. The following descriptive analyses are based on observations of caregiver and child behavior in 303 homes in Los Angeles, Philadelphia, and San Antonio. The variables used to describe caregiver and child behaviors are the 48 adult and 28 child composite variables described in Chapter VII. They are grouped here according to the domains established for caregiver and child behaviors in Chapter III.

Caregiver Behavior

Caregiver behaviors are grouped under three domains. The first domain comprises 10 socioemotional behaviors, including display of affection or comfort and efforts to socialize children, to direct them to do a particular task, or to control their behavior. The second domain of 15 variables covers the caregivers' active involvement with children as they teach new tasks or participate in activities or help or facilitate activities. The third domain is composed of five variables that account for caregiver activities that are not directly involved with children.

Socioemotional Behaviors

Socioemotional behavior represents caregiver variables that relate to the affective and social environment of the home. This set of variables reports such aspects as how much comfort, affection, and positive affect as well as how much negative affect and harsh or strict control a caregiver provides. The way in which a caregiver states and enforces rules also contributes to the home's affective environment.

Homes appear to be characterized by a combination of control and positive affect. As Table 57 shows, more than 95% of the caregivers were observed to use some form of control or directives ("do it" and "don't do it" statements). Twenty-eight percent of them used strict or harsh control at least once during the morning observation period. Cochran (1977) and Howes and Rubenstein (1978) have reported relatively high frequencies of control and restrictive behaviors among family caregivers. Despite the high occurrence of control behaviors, caregivers in our sample expressed a higher percentage of positive affect than negative (Table 57). Positive affect was recorded in more than 90% of the

Table 57

MEANS AND STANDARD DEVIATIONS FOR CAREGIVERS' SOCIOEMOTIONAL BEHAVIOR

N = 303 Caregivers

Variables	%*	$\overline{X}$ %†	SD
Prosocial	78	1.3	.015
Affection	80	1.7	.023
Comfort	51	.5	.011
Positive affect	94	5.3	.055
Negative affect	31	.3	.006
Antisocial control	51	.5	.008
Strict control	28	.2	.004
Dangerous situation control	43	.3	.005
Total control	96	3.7	.028
Directs	97	3.7	.032
Total mean percentage of time		17.5%	

---

[*] Percentage of homes in which the behavior occurred at least once.

[†] Mean percentage of time spent in behavior.

homes, and affection was given to children in 80%. Caregivers encouraged prosocial behaviors in children--to be nice to each other and to share and cooperate--in nearly 80% of the homes. Although negative affect was observed in nearly one-third of the homes, when it did occur it occurred infrequently--only 0.3% of all the observation recordings. Similarly, strict or harsh control and control for antisocial behavior occurred less than 1% of the time in those homes where it occurred at all. Comfort in response to a child's distress was provided in over one-half of the homes, but it was also a low-occurrence variable. A profile of these behaviors is shown in Figure 4.

Active Involvement with Children

The next domain encompasses variables that describe what the caregiver does with the children in her care--how much she teaches them, plays with them, helps them, or engages in social conversation. Overall, caregivers were observed to teach, participate with, help, or converse with children approximately 33.9% of the time, as shown in Table 58. The activities listed on Table 58 are not mutually exclusive from the four variables just mentioned. For example, teaching and language/information may be coded simultaneously; the two variables are highly correlated. (These correlations are discussed in Chapter VII.) The observed time spent in teaching and language/information is overlapping and cannot be summed in the total time spent. The interactions of the caregiver with a baby and a school-age child are also coded simultaneously with the other variables and are not additive.

Caregivers taught, played with, and helped children at some time during the observation period in virtually all the homes (Table 58). Teaching was the single most frequent behavior. It occurred nearly 14% of the observed time and was found in 98% of the homes. It is surprising to find that caregivers in 2.7% of the homes were not observed to be helping children in some way. Most likely these were homes that provided care for preschool children, who are likely to be more independent.

Various activities were facilitated by the caregiver (Table 58). As Figure 5 shows, activities that promote language skills and convey information occurred most frequently. This type of cognitive stimulation occurred in the majority of homes (94%). As mentioned before, there was a high correlation

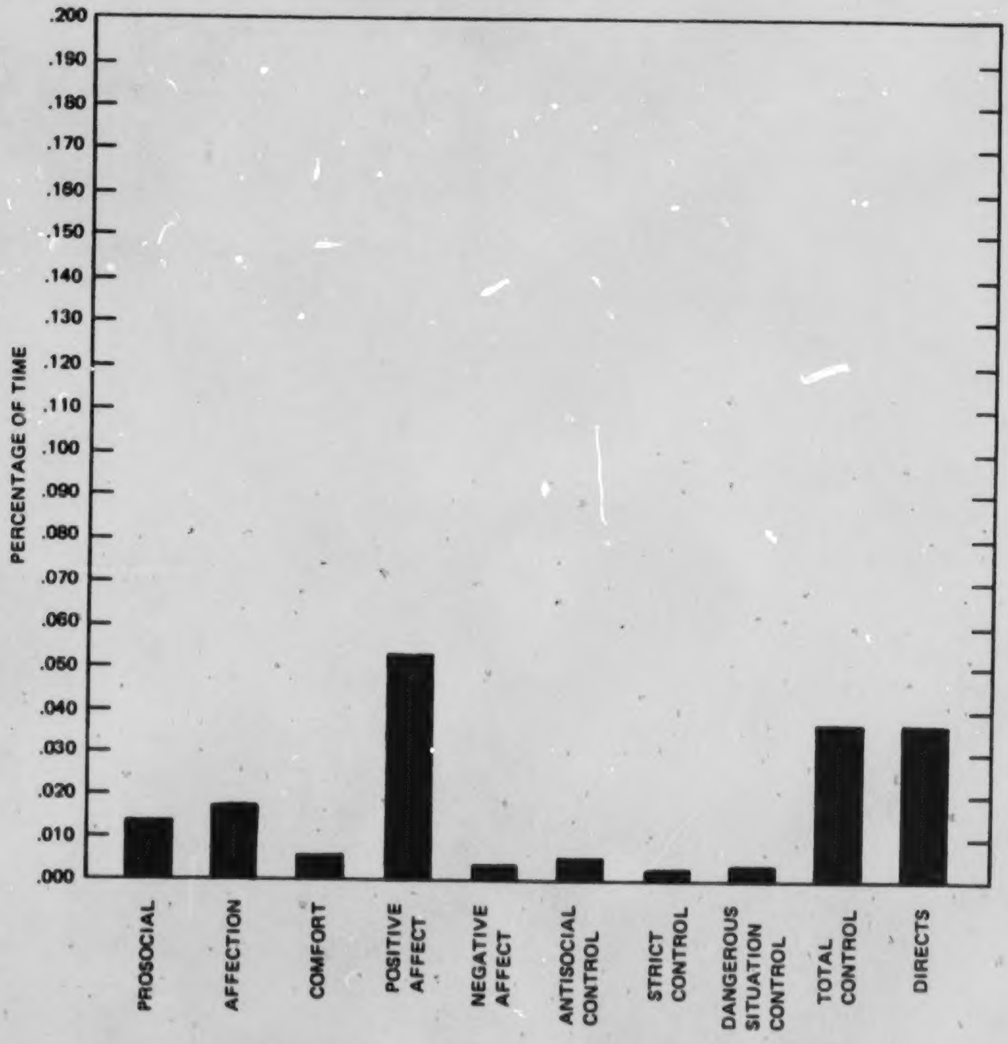


FIGURE 4 AVERAGE PERCENTAGE OF TIME THAT CAREGIVERS EXHIBITED SOCIOEMOTIONAL BEHAVIOR

(N = 303 Caregivers)

Table 58

MEANS AND STANDARD DEVIATIONS FOR CAREGIVERS' INVOLVEMENT WITH CHILDREN

N = 303 Caregivers

Variables	%*	$\overline{X}$ %†	SD
Teaching	98.0	13.9	.112
Participating	95.7	7.8	.070
Helping	97.3	8.9	.059
Conversing	94.4	3.3	.013
Total mean percentage of time		33.9	
Activities (subset of other variables)			
Language/information	94.4	8.9	.086
Structured fine motor	83.5	4.1	.048
Exploratory fine motor	61.4	1.0	.016
Gross motor	72.6	1.8	.026
Dramatic play	56.4	1.0	.017
Music/dance	46.2	1.0	.020
TV	50.5	2.3	.047
Work	74.6	1.3	.015
Physical needs	98.7	8.4	.058
Interactions			
With baby (≤ 12 months)	34.3	3.8	.071
With school age child (≤ 60 months)	16.2	1.0	.032

*Percentage of homes in which the involvement occurred at least once.

†Mean percentage of time spent in the involvement.

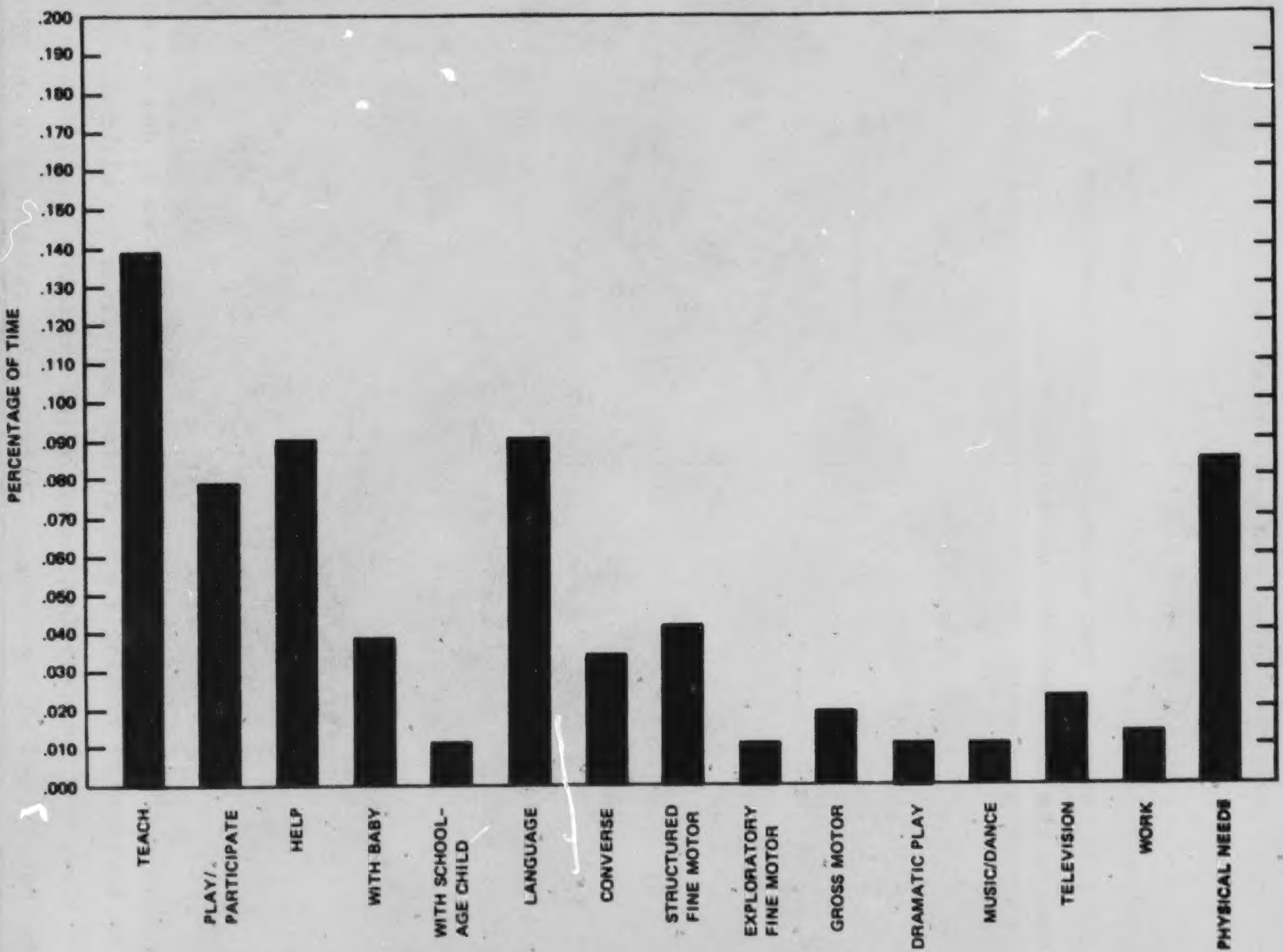


FIGURE 5 AVERAGE PERCENTAGE OF TIME THAT CAREGIVERS WERE INVOLVED WITH CHILDREN IN ACTIVITIES
(N = 303 Caregivers)

between the variables teaching and language/information. The importance of this descriptive characteristic is emphasized by Carew's (1979) study of 1- to 3-year-old children in Boston cared for in their own homes. She found a correlation between caregivers' direct participation in language-stimulating activities and children's language development.

The majority of caregivers (83.5%) in our sample spent some time with children doing puzzles or structured games requiring fine muscles; across all homes, the average was 4%. The next five activity variables listed in Table 58 occurred only 1 or 2% of the time. Those are the types of activities that children do more with other children or alone rather than with adults. Thus, those variables are best understood through examination of their rate of occurrence in the child behavior tables that follow.

Nearly all caregivers (99%) spent a considerable amount of time meeting the physical needs of children. This is not surprising because most young children need help with feeding, toileting, and dressing. On the average, these activities required approximately 8% of the caregiver's time.

In 34% of the homes, the caregiver interacted with an infant (an average of 4% of the time across all homes). These interactions most likely took place when the caregiver was meeting the baby's physical needs.

In 16% of the homes, caregivers interacted with school-age children during the morning observation. Overall, only 1% of the caregiver's attention was focused on those children. As indicated in the previous chapter, the number of school-age children in the home increases after school, and the number of interactions with them increases accordingly.

Noninvolvement with Children

Much of what caregivers do in homes is not directly involved with children (making beds, preparing food, cleaning floors). In fact, as Table 59 shows, on the average caregivers spend approximately 51% of their time in activities not directly involving children. If the caregiver has provided a positive environment with interesting things for children to do, she can go about her business of running a home without neglecting the children's needs. Figure 6 shows that housekeeping, supervising, and making preparations for children required 36% of the caregiver's time. The caregivers in the NDCHS

Table 59

MEANS AND STANDARD DEVIATIONS FOR CAREGIVERS' NONINVOLVEMENT WITH CHILDREN

N = 303 Caregivers

Variables	%[*]	$\bar{X}$ %[†]	SD
Supervise/prepare	99.3	16.5	.091
Housekeeping	98.3	19.4	.140
Converse with adults	91.1	6.3	.070
Recreation alone	80.9	7.8	.116
Out of range	66.0	1.3	.020
Total		51.3	

[*] Percentage of homes in which the activity occurred at least once.

[†] Mean percentage of time spent in the activity.

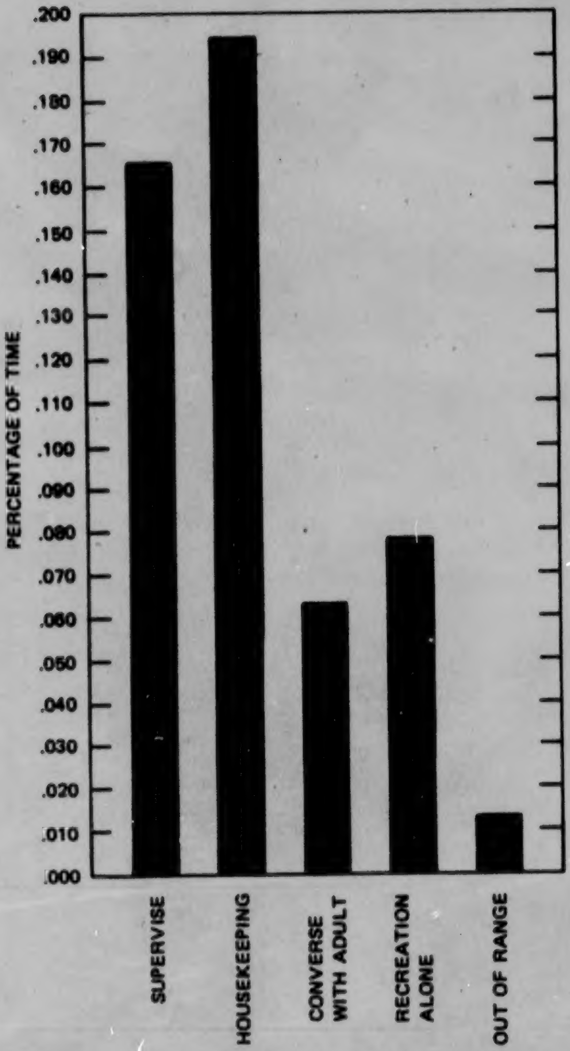


FIGURE 6 AVERAGE PERCENTAGE OF TIME THAT CAREGIVERS WERE NOT INVOLVED WITH CHILDREN
(N = 303 Caregivers)

talked with other adults or engaged in other recreational activities alone about 14% of the time, but they were out of range of the observer during the observation study only 1% of the time.

Peters (1972) found that 51% of observed caregivers were rated as spending all their time "with children," compared with 33% rated as dividing their time equally and 16% as spending more time on activities other than those with children. However, it is difficult to know how Peters defined "with children." This might have included activities in close proximity. Carew (1978) reported that a similar amount of time was spent in these noninvolvement activities by caregivers and parents in their own homes in the Boston area. Carew's findings regarding direct involvement with children are similar to ours.

Child Behavior

Data describing the average day for children in family day care are organized into the three domains of child development--socioemotional, cognitive/language, and physical motor; the child variables used in these domains are presented in Tables 60 to 62 and in Figures 7 to 9. The means and standard deviations are presented separately for the children who were observed as Focus Child 1 (age 12 to 35 months) and Focus Child 2 (age 36 to 59 months). Totals of 247 Focus Child 1s and 158 Focus Child 2s were observed in the study. The means on the tables and figures are for all the children observed in the homes. Percentages are based on the number of homes in which these behaviors and activities occurred relative to the total number of homes having children of that age.

The person with whom the child was involved (caregiver, other child, self) was always coded along with the child's activity or behavior. The variables presented on the tables are not mutually exclusive, and therefore the mean percentage of occurrence will not total 100%.

Socioemotional Behaviors

Socioemotional behaviors include how children relate to other people and themselves. Do they play with others or alone? How much do they interact with the caregiver? Are their relationships and emotional states positive, negative, or neutral?

Children of both age groups (Focus Child 1--age 12 to 35 months--and Focus Child 2--age 36 to 59 months) spent more than half their time playing alone (Table 60). This does not mean that the child was alone. The caregiver was likely to be close by, ironing clothes or preparing food or cleaning the kitchen, while the child played independently. (Other data indicate that the caregiver was out of range only 1% of the time.) This alone time ranged from the child's high involvement in activities (puzzles, artwork, swinging) to minimal involvement where children watched or monitored the activities of others. Carew's study (1978) of 1- to 3-year-old children cared for in their own homes showed that children spend 36% of their time in solitary activities, a lower percentage than that found here.

Preschool children were more often involved with another child than were the toddlers (5% and 2%, respectively). This is consistent with most other studies of young children. Older children tend to engage in interactive play more often than do younger children. It is noteworthy how little time family day care children of either age in our sample were involved with their peers. However, 12% of the homes had only one child when the observations were conducted.

Affective behaviors occurred infrequently. For the most part, children were neutral in their emotional or affect state. There are, however, some interesting age trends. Preschool children did more helping and sharing (prosocial), showed less distress, were less antisocial, and sought less attention. The caregiver also controlled the preschool child less. The toddler expressed more affection (see Figure 7). These findings might be expected in light of child development trends.

Cognitive/Language Activities

Children spent most of their time in fine motor exploratory types of activities (Table 61). These activities usually involve use of materials that are malleable and explorable--water, sand, clay, dough, paint. Younger children (22%) manifested these behaviors more than older children (15%). Older children engaged in more structured fine motor activities (10% versus 7%) such as doing puzzles and playing with tinker toys (Figure 8).

Table 60

MEANS AND STANDARD DEVIATIONS FOR FOCUS CHILD 1 AND FOCUS CHILD 2 FOR SOCIOEMOTIONAL BEHAVIOR

Variable	Focus Child 1 (N = 247)			Focus Child 2 (N = 158)		
	%[*]	$\bar{X}$ %[†]	SD	%[*]	$\bar{X}$ %[†]	SD
Prosocial	49.0	.4	.006	51.3	.7	.023
Affection	46.2	.6	.010	13.9	.1	.004
Distress	43.7	.6	.010	8.2	.1	.004
Attention seeking	55.1	.8	.011	41.1	.5	.008
Antisocial	20.2	.2	.004	15.8	.1	.004
Controlled by caregiver	71.7	2.2	.023	62.0	1.6	.023
Controls other young child	12.1	.1	.003	32.9	.3	.006
Involved with caregiver	97.6	14.3	.097	94.3	12.0	.103
Involved with other child	67.6	1.8	.023	81.6	4.9	.052
Alone	100.0	62.4	.139	100.0	51.9	.144
Monitors	98.4	11.6	.082	97.5	8.8	.081

[*] Percentage of homes in which the behavior occurred at least once.

[†] Mean percentage of time spent in behavior.

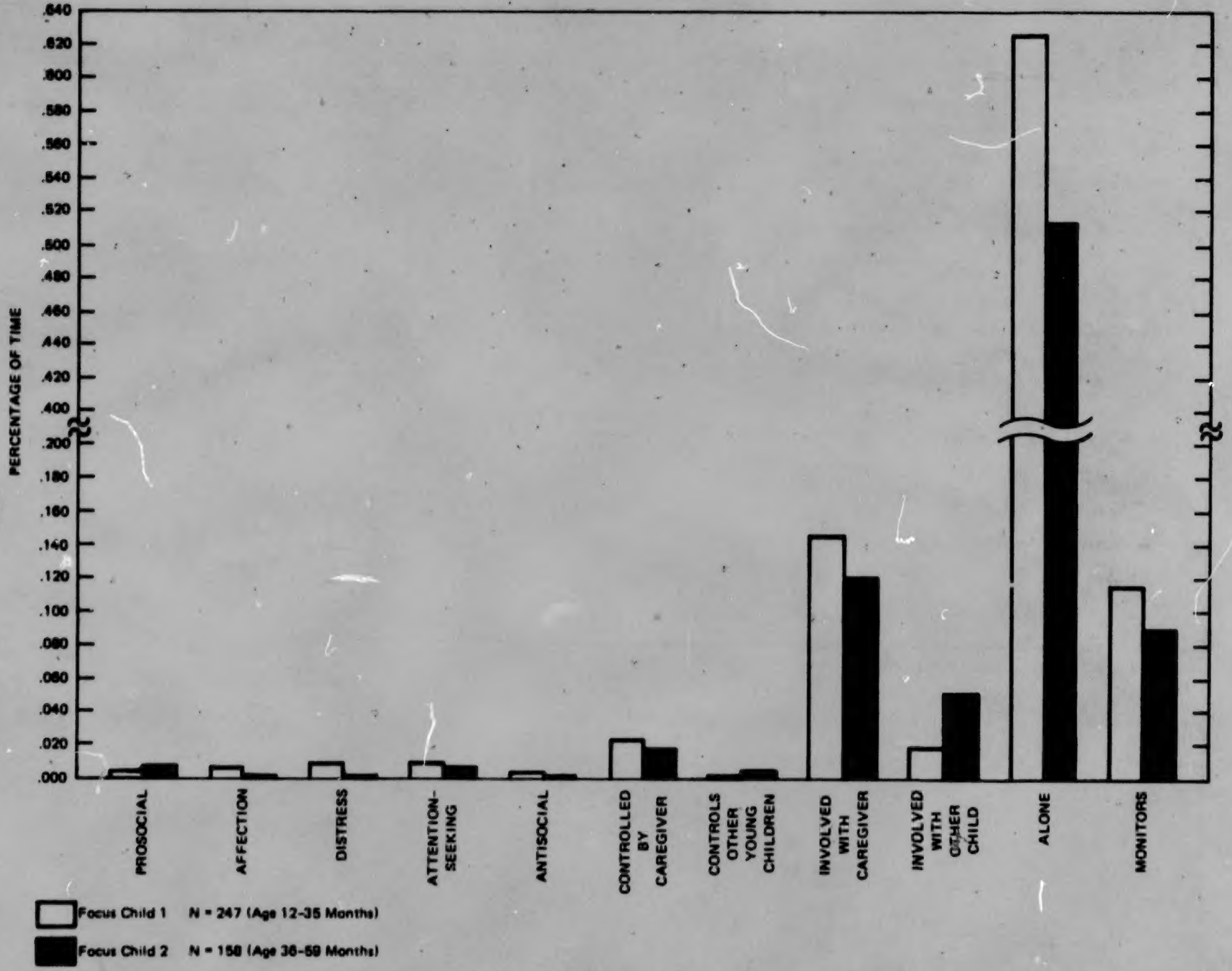


FIGURE 7 AVERAGE PERCENTAGE OF TIME THAT CHILDREN EXHIBITED SOCIOEMOTIONAL BEHAVIOR

Table 61

MEANS AND STANDARD DEVIATIONS FOR FOCUS CHILD 1 AND FOCUS CHILD 2 FOR COGNITIVE/LANGUAGE DOMAIN

Variable	Focus Child 1 (N = 247)			Focus Child 2 (N = 158)		
	%[*]	$\bar{X}$ %[†]	SD	%[*]	$\bar{X}$ %[†]	SD
Language/information	66.4	3.2	.056	69.0	4.4	.070
Converses with caregiver	27.1	.3	.009	48.1	.9	.018
Converses with child	8.9	.1	.003	32.9	.3	.006
Looking at book	28.7	.6	.016	33.5	.8	.020
Dramatic play	32.8	.8	.021	64.6	2.2	.036
Fine motor, structured	86.2	6.6	.075	90.5	10.3	.095
Fine motor, exploratory	99.2	21.8	.123	99.4	14.9	.119
Television alone	50.2	3.0	.069	48.7	4.6	.090
Educational TV with someone	26.3	1.5	.040	28.5	2.0	.040
Noneducational TV with someone	32.8	1.5	.045	29.1	1.4	.036

[*] Percentage of homes in which the behavior occurred at least once.

[†] Mean percentage of time spent in behavior.

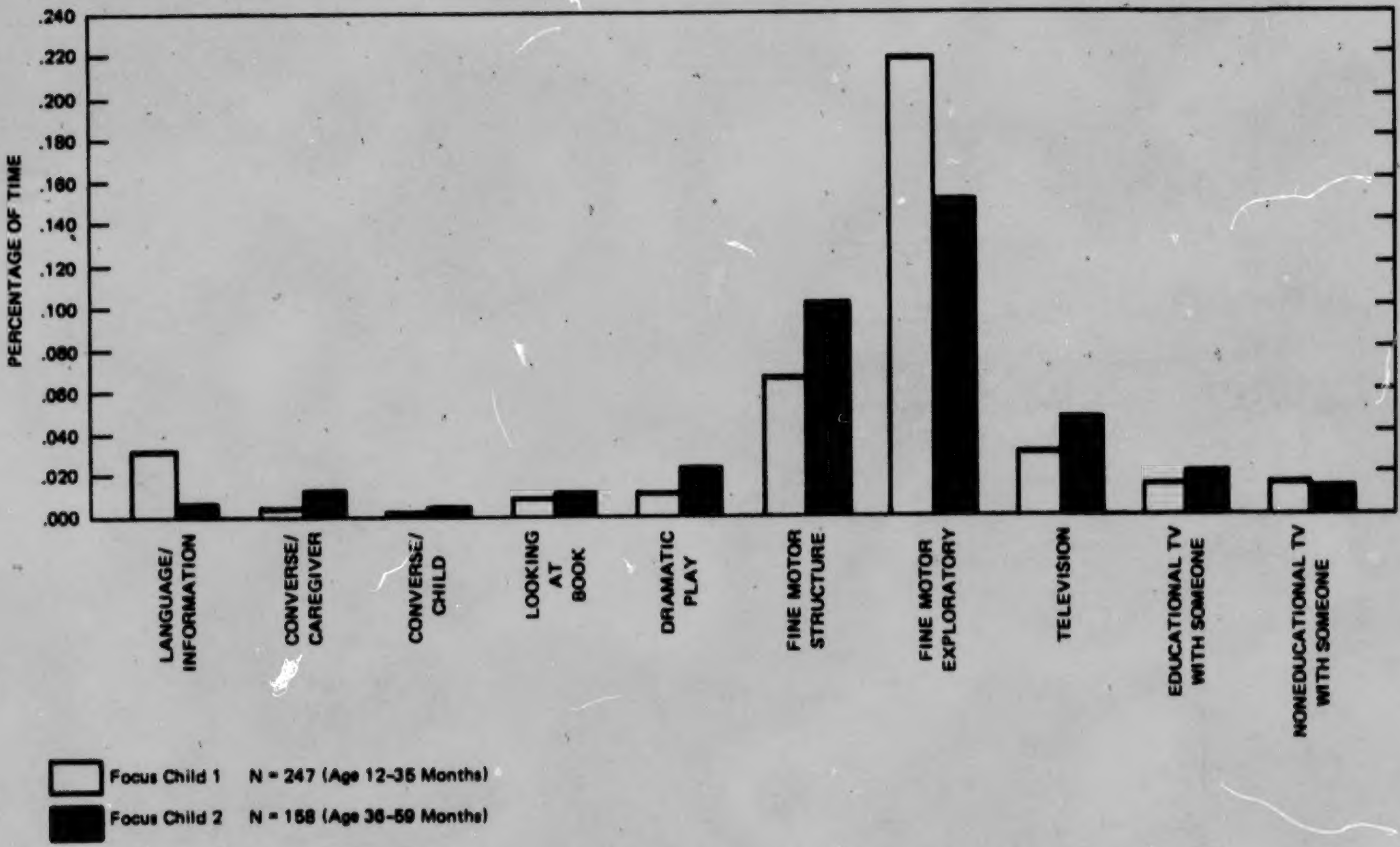


FIGURE 8 AVERAGE PERCENTAGE OF TIME THAT CHILDREN WERE ENGAGED IN COGNITIVE/LANGUAGE ACTIVITIES

Little total time was spent in watching television (6 to 8%). This finding is unexpected in light of previous research findings. Peters (1972) found that television watching was the most frequntly observed behavior in children in family day care in Pennsylvania. In our study, however, the stereotype, depicted by some child advocate groups, of little children fixed before a television set for long periods of time did not materialize. Older children watched television more often than did younger children. Children's time in watching educational and noneducational television was approximately equal. Even though television watching was moderate, children spent more time watching television than they did in dramatic play, looking at books, or talking to the caregiver or other children. Overall, this is consistent with Carew's (1978) findings in children's own homes and family day care homes.

Physical Motor Activities

In more than 95% of the homes, children took part in gross motor activity (Table 62). These are activities that require the use of large muscles--throwing balls, riding bicycles, running. The younger and older children engaged in these types of activities nearly 10% of their time (see Figure 9).

Both younger and older children were observed to help themselves dress, eat, drink, or toilet at least once in more than 95% of the homes. These activities accounted for about 11% of the observed time for the younger child and 9% for the older child. Caregivers were observed to help young children with physical needs approximately 5% of the time, twice as often as they helped the older child with these tasks.

As might be expected, the older children were observed to assist with household tasks more frequently (0.7%) than were the younger children (0.4%). The use of small muscles is required for helping with certain household tasks, such as spreading a piece of bread, setting the table, or picking up toys and placing them on a shelf. Large muscles are required to sweep, vacuum, or make beds. A child can learn much from working with an adult; and although it is a low-frequency variable, these kinds of household activities can be important in a child's social and cognitive learning.

Table 62

MEANS AND STANDARD DEVIATIONS FOR FOCUS CHILD 1 AND FOCUS CHILD 2 FOR PHYSICAL MOTOR ACTIVITY

Variable	Focus Child 1 (N=247)			Focus Child 2 (N=158)		
	%*	$\overline{X}$ %†	SD	%*	$\overline{X}$ %†	SD
Gross motor	96.4	9.5	.080	93.7	8.5	.073
Physical needs--self-help	97.6	11.2	.093	93.7	8.6	.066
Physical needs with caregiver	87.4	5.3	.050	72.8	2.4	.035
Household work	25.5	.4	.013	39.2	.7	.019

*Percentage of homes in which the activity occurred at least once.

†Mean percentage of time spent in the activity.

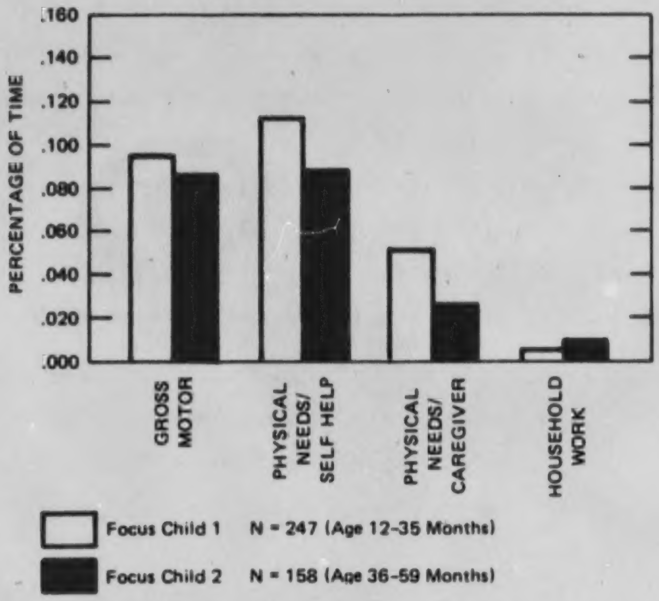


FIGURE 9 AVERAGE PERCENTAGE OF TIME THAT CHILDREN SPENT IN PHYSICAL MOTOR ACTIVITIES

Relationships Among Dependent and Independent Variables[*]

The foregoing section presented the overall nature of caregiver and child behavior in the homes observed. Caregiver and child behavior, however, may differ in homes with different regulatory status, in different geographical locations, in homes with different ethnic backgrounds, and according to caregivers' age, experience, and education. The number and age mix of children may also relate to caregiver and child behavior.

To examine these relationships, regression analysis was performed. The 21 independent variables in the study were defined in Chapter VIII.[†] A separate regression analysis was done for each of the several observation variables defined for caregivers and children.[**]

The reader will note that many interactions among the independent variables were found. That is, the effects of the regulatory status, ethnicity of caregiver, and site were related to each other. The interactions of these variables indicate that findings were specific to certain conditions, so some of the findings may not be generalizable to other situations. For example, it would not be very useful if a finding might apply only to unlicensed White caregivers in San Antonio and not hold for other cells in the design matrix.

In this section, the bivariate correlations, beta weights, and F statistic values for the beta weights are reported in the text for each significant relationship that was identified. These statistics are explained below.[††] The interactions of status by site or ethnicity are partially reported in the text.

---

[*] Dependent variables are the caregiver and child behavior variables. Independent variables are the site and day care home characteristics.

[†] In addition to the 21 independent variables, the regression equation included first-order interactions among the three design variables (status, site and ethnicity).

[**] Using these data, a subsequent set of analyses were conducted by Abt Associates, Inc., and are reported in Volume 1 of the Final Report series of the NDCHS.

[††] The explanations are borrowed in part from those of Michael Rutter in his book, Fifteen Thousand Hours (1979).

r = The correlation coefficient is a mathematical expression of the strength of association between two variables. A correlation of zero indicates no association at all, whereas a correlation of 1.0 indicates perfect agreement. Intermediate values represent intermediate degrees of association. Negative correlations indicate inverse relationships between two variables.

Beta = A beta weight is a measure of the strength of the association between an independent variable and a dependent variable. Each independent variable in a regression analysis will have a beta weight. This beta weight indicates the relationship between a particular independent variable and the dependent variable with the effects of the other independent variables being held constant.

F = A test statistic of whether a beta is significantly different from zero. The larger the value of F, the more realistic it is to believe that the beta is different from zero by more than chance.

p = The conclusion that some statistical result is "significant" means that the finding is unlikely to have arisen just by chance. The "p" value gives a more precise indication of this probability. Thus, in this case the p value of less than .001 indicates that the result would arise by chance less than once in 1000 times. If the p value is greater than .05, the result has possibly arisen by chance and is considered nonsignificant. This is shown in the text as NS (not significant).

Relationships of Regulatory Status of Homes to Caregiver Behaviors

Few differences in caregiver behavior were attributable to the regulatory status of homes. Only three caregiver behaviors were found to relate significantly to regulatory status when all other independent variables were held constant. Sponsored and regulated caregivers provided more help than did unregulated caregivers (r = -.10; beta = -.33; F = 4.28). Sponsored caregivers were more often involved with children in structured fine motor activities (puzzles or games) than were the other two groups (r = -.07; beta = -.42; F = 5.90). Unregulated caregivers less often facilitated music and dance (r = -.18; beta = -.43; F = 6.12).

There were site and ethnicity interactions with the regulatory status of homes for many of the caregiver variables. These interactions make interpretation of findings difficult. Regarding total teaching in San Antonio, there were more differences between the sponsored group and the regulated or unregulated group than between these status groups at the other two sites. As shown in Table 63, the sponsored group did twice as much teaching as did

Table 63

INTERACTIONS FOR TOTAL TEACHING AND LANGUAGE/INFORMATION VARIABLES

(Mean Percentage of Time)

Variable and Site	Status		
	Sponsored	Regulated	Unregulated
Total teaching			
Los Angeles	11.2%	10.9%	7.1%
San Antonio	27.7	13.5	13.6
Philadelphia	20.4	17.1	13.4
Total language/information			
Los Angeles	6.6	4.8	5.5
San Antonio	16.3	7.6	8.0
Philadelphia	14.2	12.8	8.6

the regulated and unregulated groups. An explanation for the difference noted in sponsored San Antonio homes may be that they are all in one sponsored network. The sponsoring agency in San Antonio may have a more consistent influence on their homes than do the sponsoring agencies in the other two sites where several networks operate.

Interestingly, the means of the registered and unregistered homes in San Antonio were nearly the same. In Los Angeles and Philadelphia, the means were lowest in the unlicensed homes. (The reader will recall that the manner of regulating homes in San Antonio is through registration rather than licensing.) Registration imposes fewer requirements and less supervision than does licensing; thus, the relationships of the three status groups are different in San Antonio than they are in other sites where licensing is required.

Similar interactions in San Antonio were found in language/information activities; San Antonio sponsored caregivers facilitated more such activities than did any other cell of caregivers in the group (see Table 63).

There was an interaction of site by status for directing Focus Child 1; unregulated caregivers in San Antonio had a higher mean on directing Focus Child 1 ($\overline{X} = .010$)[*] than did unregulated caregivers in Philadelphia or Los Angeles ($\overline{X} = .008$, $\overline{X} = .006$, respectively). These differences did not hold for sponsored and regulated homes.

Another interaction regarding directing ("do it" statements) occurred between status and ethnicity. Regulated and unregulated White caregivers ($\overline{X} = .006$, $\overline{X} = .005$, respectively) directed Focus Child 2 more often than did sonsored White caregivers ($\overline{X} = .008$). Such differences were not found in Black or Hispanic caregivers' homes.

Another interaction was found between ethnicity and home status and the exploratory fine motor variable. Table 64 shows that Black and White

---

[*] $\overline{X}$ = The average or mean occurrence of caregiver directing Focus Child 1 in unregulated caregiver homes in San Antonio.

Table 64

INTERACTIONS FOR FINE MOTOR EXPLORATORY VARIABLE BY ETHNICITY AND STATUS (Mean Percentage of Time)

Status	Ethnicity		
	Black	White	Hispanic
Sponsored	1.0%	1.6%	.9%
Regulated	1.0	1.1	.6
Unregulated	.3	.9	1.7

unregulated caregivers appeared to provide fewer exploratory materials (sand, water, paint) than did Hispanic unregulated caregivers. The reverse was true for sponsored and regulated homes.

A site-by-status interaction occurred when unregulated caregivers in Philadelphia ($\overline{X}$ = .002) were found to request help with household work from Focus Child 2 less often than did the caregivers in the unregulated homes in the other two sites ($\overline{X}$ = .005, $\overline{X}$ = .004). These differences did not hold for sponsored or regulated homes.

There was an interaction of status and ethnicity regarding the amount of conversation caregivers had with Focus Child 2. In regulated homes, Black ($\overline{X}$ = .005) and White ($\overline{X}$ = .005) caregivers tended to converse less than did Hispanic caregivers ($\overline{X}$ = .009). The sponsored and unregulated homes did not differ in this way.

When all independent variables were held constant, there were no significat differences in the amount of time the caregivers in the three status groups spent on activities without children. However, interactions with status and ethnicity did occur. White caregivers in unregulated homes spent less time ($\overline{X}$ = .02) than did Hispanic or Black caregivers ($\overline{X}$ = .04, $\overline{X}$ = .05) in supervising or preparation for children and less time out of the range of the observer (White $\overline{X}$ = .05; Black $\overline{X}$ = .09; Hispanic $\overline{X}$ = .08). Such differences were not found in sponsored or regulated homes.

There were numerous interactions of site, status, and ethnicity with the caregivers' behavior with both Focus Child 1 and Focus Child 2. The meaning of these interactions is elusive, because the interactions with Focus Child 1, Focus Child 2, and the total (which includes focus children and all other children) with the design variables are sometimes conflicting.

In sum, remarkably few differences in the caregiver behaviors were attributable to the regulatory status of homes. However, in San Antonio, the regulated and unregulated homes appeared similar, whereas sponsored homes in San Antonio provided more teaching and language/information than did sponsored homes in Los Angeles and Philadelphia.*

The caregiver training program offered to homes in the San Antonio network may help explain some of these findings. The Economic Opportunities Development Corporation (EODC) offers training specifically geared to the family day caregivers it sponsors in San Antonio. Other potential training sources for caregivers in San Antonio are:

- Early Childhood Development Division sources, which are concerned with the developmental needs of children and issue publications on child development.
- Two intervention programs--Project Child and Project Advance--which are directed at children under 3 years of age and their parents.

A number of organizations in Philadelphia provided training in child care. However, many of these offered training for specific subsidized groups such as:

- Sixteen local colleges and centers funded through Title XX to offer training for sponsored caregivers.
- Temple University, which offered training for WIN caregivers.
- The Day Care Association of Southeastern Pennsylvania, which focused on Title XX-related concerns and center care.

The following organizations and agencies offered training to any and all interested parents and caregivers:

- Schools and colleges, offering full-time day programs in early childhood education.

---

*See Volume II of the Final Report series of the NDCHS for subsequent analyses of these data.

- Health Advocacy Training program, a day program emphasizing health, safety, and nutrition in day care.

The offering of courses during the workday hours limits the opportunity for caregivers who have no substitute adults available.

In general, the training programs in the Los Angeles networks ranged from minimal training or none in one or two programs to extensive training in several programs. The networks with extensive training programs required that caregivers attend preservice training before becoming part of the system. After becoming members of the network, caregivers were encouraged to attend inservice training and follow-up sessions. These extensive training programs focused on the self-esteem of the caregivers and helped them to see themselves as professionals. The amount of training varied considerably in Los Angeles, ranging from 0 to 8 hours per month. Incentives also ranged from minimal offerings to distributing supplies at the training sessions and offering payment to participating caregivers.

In all three sites, more sponsored caregivers (80%) than licensed caregivers (37%) said they received child care training. However, each group reported having about the same amount of contact (18 to 21%) with groups other than the licensing or sponsoring agency. Table 65 shows these training data.

Table 65

PERCENTAGE OF CAREGIVERS TRAINED IN CHILD CARE

	Los Angeles	San Antonio	Philadelphia
Sponsored	61%	81%	82%
Regulated	32	27	37
Unregulated	23	12	27

On the average, caregivers are offered 5 hours of training per month. The specifics of training, however, are difficult to interpret. Training experiences for caregivers vary in type, intensity, and duration. At the agency level, considerable variation was reported in quality of programs, range of topics, frequency of sessions, and requirements for attendance.

Relationship of Regulatory Status of Homes to Child Behaviors

As with caregiver behavior, few child behavior variables were related to regulatory status. Only two significant differences in child behavior can be attributed to the status of homes when all other variables are held constant. Focus Child 1 in unregulated homes displayed less affectionate behavior than did children of the same age who were in regulated or sponsored homes ($r = .03$; beta $= -.44$; $F = 5.48$). Focus Child 2 evidenced more distress in unregulated homes than did children in regulated or sponsored homes ($r = .12$; beta $= .78$; $F = 8.27$). Children of both age groups in unregulated homes may have a somewhat different socioemotional experience than do children in regulated and sponsored homes.

Little can be said regarding regulatory status and any of the remaining 26 child behavior variables. The existence of a large number of interactions of status by site and by ethnicity makes interpretation of the findings difficult. Examples of these interactions follow. Focus Child 1 in regulated homes tended to seek attention more often than did children in unregulated or sponsored homes. Children in White regulated homes were found to seek attention less ($\overline{X} = .002$) than did Black ($\overline{X} = .003$) or Hispanic ($\overline{X} = .003$) children in regulated homes. This difference was not found in sponsored or unregulated homes. Thus, the effect of status on children's attention seeking varies by the ethnicity of the caregiver. Interpretation is rendered more difficult because this behavior occurred less than 0.4% of the observed time in these homes.

Another interaction of status and ethnicity indicated that Hispanic Focus Child 1 in regulated homes experienced more control from caregivers ($\overline{X} = .03$) than did Black ($\overline{X} = .02$) or White children ($\overline{X} = .02$) in regulated homes. These differences did not hold for sponsored and unregulated homes.

No cognitive language variables were related to status of the home, but there were numerous interactions. Children in San Antonio's regulated homes ($\overline{X}$ = .004) tended to look at books more often than did children in San Antonio's unregulated ($\overline{X}$ = .004) or sponsored homes ($\overline{X}$ = .006). These relationships were not similar in Philadelphia or Los Angeles.

In the case of structured fine motor behavior, Focus Child 1 in unregulated White homes ($\overline{X}$ = .10) tended to engage in this activity significantly more often than did Hispanic or Black children in unregulated homes ($\overline{X}$ = .04, $\overline{X}$ = .03, respectively). This occurred more frequently in sponsored and regulated homes, but it did not differ by ethnicity.

Findings regarding Focus Child 1 watching television with someone are complicated. Interactions indicate that this behavior is different for children in San Antonio White homes than it is for other San Antonio ethnic groups. In addition, children in Black regulated homes were found to be different in how much they watched television from the children in other Black sponsored or unregulated homes.

No significant differences in the physical motor variables can be attributed to the status of the homes. There were five interactions between site and ethnicity and status regarding work for Focus Child 1 and four interactions for work and Focus Child 2. Again, with so many interactions, a definitive statement cannot be made regarding these relationships.

Relationship of Site to Caregiver and Child Behaviors

Table 66 shows the 30 significant relationships of site with caregiver and child behaviors that were found. Here all other independent variables (e.g., caregiver regulatory status, ethnicity, caregiver characteristics, and number of children) are held constant as the relationships of the site to the caregiver and child behavior are examined.

Philadelphia caregivers accounted for many of these relationships. They did more teaching, more playing/participating, more facilitation of language/information, and more facilitation of work activities with the total group of children than did caregivers in Los Angeles and San Antonio. Also, they more often controlled children in dangerous situations and more often expressed negative affect.

Table 66

SIGNIFICANT RELATIONSHIPS OF SITES WITH CAREGIVER AND CHILD BEHAVIORS

Variable	Site	r	Beta	F*
Caregiver				
Caregiver teaches C1 (Focus Child 1)	San Antonio	.132	.404	4.602
Caregiver teaches C2 (Focus Child 2)	Philadelphia	.099	.375	5.195
Caregiver teaches/total	Philadelphia	.189	.279	4.482
Caregiver plays/participates with C1	Philadelphia	.135	.507	9.800
Caregiver plays/participates with C2	Philadelphia	.307	.503	7.310
Caregiver plays/participates--total	Philadelphia	.364	.475	12.020
Caregiver directs C2	San Antonio	.338	.471	4.856
Caregiver directs/total	San Antonio	.417	.552	11.604
Caregiver converses with C2	Philadelphia	.247	.412	4.581
Caregiver facilitates prosocial with any child	San Antonio	-.074†	.382	5.063
Caregiver facilitates language/information with C1	Philadelphia	.100	.433	6.865
Caregiver facilitates language/information--total	Philadelphia	.234	.341	6.330
Caregiver facilitates work with C1	San Antonio	.203	.447	5.879
Caregiver facilitates work with C2	Philadelphia	.076	.533	11.018
Caregiver facilitates work/total	Philadelphia	.136	.526	14.678
Caregiver facilitates gross motor activities	San Antonio	.148	.404	5.283
Caregiver interacts with baby	Philadelphia	-.122	-.267	5.333
Caregiver expresses negative affect	Philadelphia	.272	.421	8.330
Caregiver controls/total	San Antonio	.135	.450	6.977
Caregiver controls danger	Philadelphia	.153	.303	4.236
C1				
C1 with caregiver/total	San Antonio	.120	.450	6.498
C1 in prosocial activity	Philadelphia	.209	.389	4.335
C1 in exploratory fine motor with young child	Philadelphia	-.081	-.375	3.940
C1 in exploratory fine motor with caregiver	San Antonio	.347	.500	7.205
C1 controlled by caregiver	Philadelphia	.325	.495	9.184
C1 monitors/total	Philadelphia	-.231	-.344	6.082
C2				
C2 in exploratory fine motor with caregiver	San Antonio	.225	.661	7.143
C2 in exploratory fine motor with caregiver	Philadelphia	-.134	.430	4.246
C2 monitors/total	San Antonio	-.187	-.771	11.034
C2 with other young children/total	San Antonio	.201	.507	4.386

---

*F - relationships significant at $p < .05$ are reported here.

†r - The first negative correlation on Table 66 indicates that caregivers in San Antonio facilitate prosocial activities with a child less often than do caregivers in Philadelphia or Los Angeles.

Philadelphia caregivers facilitated more language/information activities for and played with Focus Child 1 more often than caregivers in San Antonio and Los Angeles. In addition, they played and conversed with Focus Child 2 more often than did caregivers at the other two sites. Philadelphia caregivers interacted with babies less often than other caregivers, however.

San Antonio caregivers did more directing with Focus Child 2 and indeed with the total group of children. They facilitated prosocial behaviors and gross motor activities more often, and they made control statements about children's activities and behaviors more often than did Philadelphia and Los Angeles caregivers.

Caregivers in Los Angeles did less teaching of and facilitated fewer work activities with Focus Child 1 than did the caregivers in Philadelphia and San Antonio.

On the whole, Philadelphia caregivers appeared to be more involved with the children. They did more teaching and participating in such activities as reading books and encouraging language than did caregivers in the other two sites.

Caregivers in San Antonio more often attempted to socialize the children by encouraging them to share and help (prosocial). They also did more directing and controlling of all the children in their care. These methods contributed to the socialization of children as they learned to follow the caregiver's "do it" and "don't do it" commands. The San Antonio caregivers also spent more time facilitating such activities as riding tricycles, running, and climbing.

Five relationships between site and child variables were found. Focus Child 1, the toddler, in Philadelphia was more often observed in prosocial activities and received more controlling statements from the caregiver. This child was less often engaged in exploratory fine motor activities with another young child and spent less total time monitoring others' activities than did Focus Child 1 in San Antonio or Los Angeles. Focus Child 2 in Philadelphia was more often observed in exploratory fine motor activities with the caregiver.

Focus Child 1 in San Antonio spent more time involved with the caregiver in general and more time in exploratory fine motor activities with the caregiver in particular than did focus children of the same age in Los Angeles and Philadelphia. Focus Child 2 in San Antonio was also observed more often in exploratory fine motor activities with the caregiver and spent more time involved with other young children than Los Angeles and Philadelphia children of the same age. San Antonio Focus Child 2 was observed to be monitoring others' activities less often than Focus Child 2 in other sites.

In sum, the city where the family day care home was located seemed to have an impact on the behaviors of caregivers and children. There were also numerous interactions of site with ethnicity and site with status. It is possible that study of cities similar in racial composition and regulatory status to Philadelphia, Los Angeles, and San Antonio would produce similar findings regarding family day care. This hypothesis would need to be tested in a study of cities with similar geographic and demographic characteristics.

Relationship of Ethnicity to Caregiver and Child Behaviors

Caregiver ethnicity showed a clear relationship (that is, free of interactions with site or status) with only three of the 48 caregiver behavior variables when the other independent variables were held constant. Black caregivers directed Focus Child 1 to other activities more often than did White or Hispanic caregivers (r = -.06, beta = .82, F = 16.17). Black caregivers also directed Focus Child 2 to other activities more often than did White or Hispanic caregivers (r = -.11, beta = .46, F = 5.50). White caregivers interacted with school-age children less frequently than did Black or Hispanic caregivers (r = .05, beta = -.50, F= 5.72). White caregivers in our sample, however, provided care for school-age children less often than the other groups.

Regarding the child behavior variables, all significant relationships between caregiver ethnicity and Focus Child 1 observation variables were complicated by interactions with site or regulatory status of the homes. Therefore, a relationship between caregiver ethnicity and the activities and behaviors of children of 1 or 2 years of age in day care homes cannot be safely predicted.

When other independent variables were held constant, two relationships between caregiver ethnicity and Focus Child 2 observation variables emerged. There was a significantly higher occurrence in White homes of Focus Child 2 looking at books (r = .17, beta = .68, F = 4.01) and a significantly lower occurrence in Black homes of Focus Child 2 engaging in physical needs with the caregiver (r = -.22, beta = -.61, F = 4.71). Neither of these Focus Child 2 observation variables showed an interaction with site or regulatory status.

All other relationships between ethnicity and behavior were complicated by interactions. Sixteen of the 48 caregiver observation variables showed significant interactions between ethnicity and site or regulatory status. The regression analyses revealed eight significant interactions between ethnicity and site or status in the Focus Child 1 dependent variables and six interactions in the Focus Child 2 variables. These sparse relationships of ethnicity to caregiver or child behavior and the interaction effect of site and status with ethnicity prohibit any conclusions about cultural patterns of the caregiver or children in our sample.*

Relationship of Caregiver/Home Characteristics to Caregiver and Child Behaviors

Characteristics of the caregiver herself or the day care home may relate to caregiver and child behaviors. The relationship of caregiver age, years of experience in caring for children, and years of formal education to caregiver and child behaviors was examined to determine whether caregivers' personal characteristics had an effect. Variables describing the home were also examined, including the presence of the caregiver's own child, the presence of a child relative of the caregiver, and the percentage of girls present. Table 67 lists the characteristics examined and the results of the analysis. The reader is reminded that in this section all other independent variables are held constant as each independent variable is examined for relationships to dependent variables. Note that the sample of 303 caregivers described here differs somewhat in these characteristics from the sample of 793 caregivers described by Abt Associates, Inc. (see Volume II of the NDCHS Final Report).

---

*See Volume II of the Final Report series of the NDCHS for subsequent analyses of these data.

Table 67

SIGNIFICANT* RELATIONSHIPS OF CAREGIVER/HOME CHARACTERISTICS TO CAREGIVER AND CHILD BEHAVIORS

Characteristics	r	Beta	F
Caregiver education (years of schooling)			
Caregiver behavior			
Helps/total	-.15	-.15	5.30
Directs Focus Child 1	-.23	-.14	3.97
Directs/total	-.20	-.18	7.09
Fine motor exploratory	-.12	-.18	6.42
Focus Child 1			
Looking at book	-.03	-.17	4.24
Household work	.08	.22	7.63
Focus Child 2			
Physical needs-caregiver	.00	.30	8.05
Physical needs alone	.03	.32	8.47
TV alone	-.19	-.30	7.19
Caregiver experience			
Caregiver interacts with baby	-.06	-.13	4.76
Focus Child 1 antisocial	.16	.22	7.10
Focus Child 2 exploratory fine motor with young child	.15	.30	6.64
Caregiver's age			
Directs child	.25	.26	4.78
Converses with adult	.11	.18	4.10
Structured fine motor	-.14	-.19	4.94
Presence of own child			
Caregiver behaviors			
Converses with Focus Child 1	-.19	-.18	4.67
Converses with another adult	.04	.18	5.66
Controls/total	.11	.16	4.68
Focus Child 1			
In physical needs alone	.09	.18	4.64
Focus Child 2			
Watches educational TV with someone	-.15	-.26	4.24
Relative of caregiver			
Caregiver behaviors			
Helps Focus Child 2	-.09	-.20	4.84
Controls/total	.11	.16	7.03
Focus Child 2			
In prosocial activity	.16	.25	6.65
In dramatic play	.10	.19	3.94
Engages in work	.11	.20	4.14
Sex of child (female)			
Caregiver behaviors			
Converses with Focus Child 1, not negative	.09	.14	4.42
Facilitates exploratory fine motor with any child	-.10	-.13	5.02
Focus Child 1			
In dramatic play	.20	.24	12.82
In conversation with caregiver	.18	.18	7.61

*Significant at $p < .05$. This means that the probability is less than 5 out of 100 that these relationships occurred by chance.

See p. 217 for interpretation of r, Beta and F.

Caregiver Education

The average number of years of education for the observation sample was 11.3. Actually, the education of the caregivers differed very little. The majority had not finished high school and only a few had college training. Young White caregivers tended to have more education.

Surprisingly few differences were identified that were related to caregiver education. Caregivers with more education tended to do less total helping and less directing of Focus Child 1 and the total group of children and facilitated fine motor exploratory activities less often than caregivers with less education.

In the child data, Focus Child 1 was found to look at books less often in homes where the caregivers had more education and was more often engaged in helping with household chores. Focus Child 2 was more involved with physical needs both alone and with the caregiver in homes where the caregiver had more formal education. Television was watched less often by Focus Child 2 in homes where the caregiver had more education (see Table 67). These findings indicate that caregivers' formal education does not bear in any important way on the care children receive.

Caregiver Experience

The years of experience in the observation component of the NDCHS ranged from 0.09 to 36.5; the average was 7.3 years. Only three relationships were found between caregiver experience and caregiver or child behavior. Caregivers with more experience were observed to interact less often with infants than were caregivers with less experience. The more experienced caregivers tended to have fewer infants in their homes, however. In homes where the caregiver had more experience, Focus Child 1 showed more antisocial behavior to other young children and Focus Child 2 engaged in more exploratory fine motor activities with young children (see Table 67).

As with caregiver education, these data do not indicate that more caregiver experience is related positively to better child care. (Pages 92 to 95 of this report describe the relationships of the independent variables.)

Caregiver Age

The average age of the caregiver was 43 years and the standard deviation was 13 years. Only three caregiver behaviors were associated with age of the caregiver. Older caregivers were inclined to engage in more conversation with peers. They provided fewer structured fine motor activities such as puzzles and games for children, and they were more directive toward Focus Child 2--they used more statements such as "pick up the toys" or "wash your hands." As described earlier in this report, older caregivers were more likely to provide care for relatives. Children in this case may be treated more like family and less like guests in the home.

Presence of Caregiver's Own Child

In 39% of the homes, one or more of the children were the caregiver's own. These providers were younger and had less experience. However, the presence of the caregiver's own child in the home accounted for few behavior differences. Focus Child 1 took care of his or her own physical needs more often, and Focus Child 2 watched educational television with others less often. The caregiver conversed less with Focus Child 1 but more with other adults. When her own child was present, the caregiver exerted more control of all children (see Table 67). The reader is reminded that Focus Child 1 and 2 were most likely not the caregiver's own child; wherever possible, the caregiver's own child was not selected for observation.

Presence of a Caregiver's Relative

In 20% of the homes, one or more children were related to the caregiver but were not the caregiver's own children. These providers tended to be older and most likely to be grandmothers. The presence of a child relative of the caregiver affected Focus Child 2 in several ways. That child more often exhibited prosocial behaviors and engaged in dramatic play and household work and less often got physical help from the caregiver. In addition, the caregiver exerted control with the children in her care more often when a child relative was present (see Table 67).

Sex of Children

Few effects of sex of the children in the home were found. The data indicate that when more girls were present, Focus Child 1 engaged in more dramatic play and in more conversation with the caregiver. This raises the speculation that even at an early age, girls stimulate more verbal behavior than do boys. Also, the caregiver less often facilitated exploratory fine motor activities (activities that might be considered messy--paint, water, dough) when there were more girls in her care.

Summary of Caregiver and Home Characteristics

In summary, the independent effects of caregiver and home characteristics on child care were few. Perhaps most noteworthy was that, counter to what might have been expected, caregivers with more education or more experience did not provide more socializing influences or more opportunities to learn. Nor did they provide a more positive or supportive environment. Factors other than these might be more important when choosing a day care home.

Relationship of Number and Age of Children to Caregiver and Child Behaviors

Relationships of the age and number of children in the home to caregiver and child behaviors were examined through several independent variables: number of infants, number of Focus Children 1, number of Focus Children 2, presence of school-age children, standard deviation or age mix of the children in the home, and the average age of children.

Infants

Less than one-third of the homes provided care for infants. However, in homes where such care was provided, many significant relationships were found between the number of infants in the home and caregiver and child behaviors; Table 68 shows these relationships.

The presence of infants affected younger children (Focus Child 1) more than older children. Caregivers expressed more positive affect when babies were present. However, infants placed some constraints on caregivers. Less teaching, less playing and participating, less helping, and less music or dance occurred in homes with infants. When infants were in the home, caregivers interacted with them and less often joined the other children in watching television.

Table 68

SIGNIFICANT* RELATIONSHIPS OF INFANTS IN THE HOME TO CAREGIVER AND CHILD REHAVIORS

Infants Defined as Less Than 12 Months Old

Behaviors	r	Beta	F
Adult Behaviors			
Teaches/total	-.10	-.13	5.39
Plays/participates--total	-.11	-.13	4.99
Helps/total	-.04	.11	4.03
Converses with another adult	.15	.20	10.41
Facilitates music/dance--total	-.14	-.13	4.88
Facilitates TV with any children	-.13	-.15	6.51
Interacts with a baby	.58	.58	143.55
Expresses positive affect	.20	.20	10.15
Focus Child 1			
Seeks attention of caregiver	-.14	-.14	4.69
Engages in dramatic play	.19	.20	9.10
Engages in looking at a book	-.12	-.14	4.27
Controls a young child	.22	.18	6.98
Monitoring/total	.07	.11	4.03
With other young child	.26	.25	13.93
With caregiver/total	-.20	-.15	5.70
Focus Child 2			
Engages in gross motor	-.16	-.20	4.88
Controls a young child	.16	.19	4.47

---

*Significant at $\rho<.05$. This means that the probability is less than five out of 100 that these relationships occurred by chance.

The presence of infants also affected the behaviors of children (see Table 68). The younger child was more affected by the presence of infants. In homes with infants, Focus Child 1 sought less attention from the caregiver and spent less time directly involved with the caregiver. When infants were present, Focus Child 1 seemed more independent; for example, the child engaged in more dramatic play, spent more time with other children, and made more attempts to control other young children. Children of this age also did more monitoring in homes with infants. Perhaps they watched as the caregiver took care of the baby.

Only two significant findings related to Focus Child 2. Similar to the younger child, Focus Child 2 tried to control the other younger children when babies were present in the home. Possibly the caregiver was busy and the children aided in controlling each other. (Note: Controlling does not imply antisocial behavior.) When babies were present, Focus Child 2 was less often observed in gross motor activities. These are large muscle games and are often associated with noise, and perhaps caregivers limited these activities when infants were present.

Number of Children Aged 12 to 35 Months (Focus Child 1)*

The presence of a greater number of children in the Focus Child 1, or toddler, age range affected caregivers' behavior in many ways. As Table 69 shows, most (16 of 19) of the relationships were negative.

Caregivers spent less time teaching the 3- or 4-year-old child when more toddlers were present. Several 1- or 2-year-old toddlers required much of the caregivers' attention. Even the infants received less attention in homes with several toddlers. With more toddlers, caregivers less often played or participated with children, less often read books or facilitated language, provided fewer puzzles and games, and so on. Although more toddlers were present in the home, the caregiver was observed to provide less help with physical needs. Perhaps the children in these homes helped themselves more frequently than those in homes where there were fewer toddlers. Interestingly, the caregiver spent more time in attempting to socialize and control the children and encouraging them to help with household tasks when more toddlers

---

*Focus Child 1 is also referred to as a toddler in this chapter of the report.

Table 69

SIGNIFICANT* RELATIONSHIPS OF NUMBER OF FOCUS CHILDREN 1 IN THE HOME TO CAREGIVER AND CHILD BEHAVIORS

Focus Child 1 Was 12 to 35 Months Old

Behaviors	r	Beta	F
Adult			
Teaches Focus Child 2	-.26	-.29	6.32
Plays/participates with Focus Child 1	-.18	-.17	5.56
Helps Focus Child 1	-.15	-.14	4.02
Helps Focus Child 2	-.17	-.29	6.05
Helps/total	-.33	-.23	11.77
Directs Focus Child 2	-.23	-.27	6.52
Converses with Focus Child 2	-.29	-.39	12.43
Involved in housekeeping	-.21	-.14	4.36
Involved in recreational activity alone	-.26	-.19	8.52
Facilitates prosocial with any children	.25	.22	10.00
Facilitates language/information with Focus Child 1	-.13	-.15	4.47
Facilitates language/information with Focus Child 2	-.23	-.29	6.02
Facilitates structured fine motor with Focus Child 2	-.27	-.24	4.27
Facilitates work/total	.12	.24	11.62
Facilitates physical needs with Focus Child 1	.17	.15	4.43
Facilitates physical needs with Focus Child 2	-.17	-.27	5.24
Facilitates physical needs/total	.30	.22	11.04
Interacts with a baby	-.03	-.19	10.31
Controls/total	.23	.25	12.89
Focus Child 1			
Engages in affectionate behavior	-.18	-.18	5.52
In distress	-.11	-.16	4.45
Engages in exploratory fine motor activity with caregiver	-.23	-.15	4.24
Enages in physical needs while interacting with caregiver	-.23	-.17	5.27
Controls a young child	.26	.23	9.36
With other young child/total	.19	.18	5.86
With caregiver/total	-.29	-.22	11.05
Focus Child 2			
Antisocial to young child	.37	.33	7.43

*Significant at $p < .05$. This means that the probability is less than 5 out of 100 that these relationships occurred by chance.

were present. Caregivers also exerted more control when toddlers were present. The indication is that the presence of several toddlers in the home kept the caregiver very busy.

The presence of several toddlers in the home also affected the behaviors of Focus Child 1 (see Table 69). When more toddlers were present (as was found when infants were present), Focus Child 1 less often interacted with the caregiver or engaged in exploratory fine motor activities. Those children showed less affection but also less distress. They played and interacted more often with other young children and made more attempts to control them. In the presence of more children of his or her own age, Focus Child 1 operated somewhat more independently and engaged less often with the caregiver for physical needs.

The older Focus Child 2 was not affected in as many ways by the presence of several toddlers. The only effect identified was a higher incidence of antisocial behavior when more toddlers were present. The older child may have been annoyed by interference from several toddlers and responded with some antisocial behavior.

Number of Children Aged 36 to 59 Months (Focus Child 2)*

The presence of more children in the Focus Child 2 age range related significantly to nine caregiver behaviors. Table 70 shows that seven of these variables are associated with Focus Child 1. The caregiver was less likely to teach, play/participate with, direct, or converse with Focus Child 1 when more preschool children were present. This propensity for the toddler to receive less attention when more preschool children are present is noteworthy, and it is useful information for parents who are selecting a family day care home for a toddler. Although the caregiver facilitated fewer language activities with younger children, overall she facilitated more language in general when more preschool children were present. Three- and 4-year-old children are usually interested in words and probably interact with caregivers in a manner that encourages verbal interactions to occur.

Despite this change in the caregiver's behavior, the presence of more preschoolers in the home had a limited effect on the behavior of the toddlers.

---

*Focus Child 2 is sometimes referred to as a preschooler in this part of the report.

Table 70

SIGNIFICANT* RELATIONSHIPS OF NUMBER OF FOCUS CHILDREN 2 TO CAREGIVER AND CHILD BEHAVIORS

Focus Child 2 Was 36 to 59 Months Old

Behaviors	r	Beta	F
Adult			
Teaches Focus Child 1	-.29	-.22	8.97
Plays/participates with Focus Child 1	-.28	-.16	4.67
Directs Focus Child 1	-.31	-.22	11.49
Converses with Focus Child 1	-.25	-.18	5.91
Involved in housekeeping	-.18	-.23	12.35
Facilitates language/information with Focus Child 1	-.26	-.16	4.96
Facilitates language/information--total	.10	.15	5.24
Facilitates work with Focus Child 1	-.28	-.26	13.21
Facilitates physical needs with Focus Child 1	-.31	-.16	4.93
Focus Child 1			
Engages in gross motor activity	.11	.16	4.67
Alone/total	.22	.28	13.99
Focus Child 2			
None			

[*] Significant at $\rho < .05$. This means that the probability is less than 5 out of 100 that these relationships occurred by chance.

254

The toddler increased his or her gross motor activities such as running, jumping, and climbing. This may be the result of the toddler's following the active preschooler around. However, the toddler also spent more time alone when more preschoolers were present. The caregiver behavior reported above suggests that the preschooler got more attention than did the toddler, and it may explain in part the increased time alone for the toddler.

The presence of other preschoolers had no significant effect on Focus Child 2's behavior. Data sets referred to earlier in this section describe the preschooler as gregarious and tending to interact with peers. Thus, the presence of several peers would probably not make a difference to these children.

Number of Children Aged 60 Months or Older (School-Age Children)

The presence of school-age children in the home had little apparent effect on caregiver or child behaviors. Naturally, the caregiver conversed a little more with the school-age child ($r = .20$, beta = .26, $F = 11.17$). Focus Child 1 (the toddler) spent more time with the caregiver and engaged in language/information activities with the caregiver more frequently when school-age children were in the home ($r = .27$, beta = .48, $F = 30.41$). Focus Child 2 (the preschooler) watched less television alone ($r = .00$, beta = -.27, $F = 4.29$). Table 71 presents these data.

Age Mix

The standard deviation of child ages (exluding infants) was used to compute the age mix of the children in each home. A small (narrow) standard deviation indicates homogeneity; a large (wide) standard deviation indicates heterogeneity. The nature of the age mix may relate to how caregivers and children behave.

Three caregiver behaviors were related to age mix. The caregiver helped and facilitated Focus Child 1's physical needs more frequently when the age mix was greater (see Table 71). In fact, caregivers gave more help to all children when the age mix was greater. In the previous section, we stated that a large number of toddlers reversed this relationship with caregiver help, so that caregivers provided less help as the number of toddlers increased.

Table 71

SIGNIFICANT[*] RELATIONSHIPS OF AGE MIX[†] TO CAREGIVER AND CHILD BEHAVIORS

Behaviors	r	Beta	F
Adult (N = 303)			
Helps Focus Child 1	-.08	.26	7.01
Helps/total	.04	.20	6.84
Facilitates work with Focus Child 1	-.21	-.26	7.02
Facilitates physical needs with Focus Child 1	-.06	.29	8.64
Facilitates physical needs/total	.04	.19	6.35
Focus Child 1 (N = 247)			
Engages in affectionate behaviors	.00	.23	4.45
In distress	-.04	.28	6.73
Seeks attention of caregiver	.03	.24	5.09
Engages in language/information with caregiver	-.07	-.29	8.67
Engages in gross motor activity	.03	.22	4.43
Watches any TV alone	-.14	-.24	5.24
Watches educational TV with someone	.12	.24	5.02
Engages in conversation with young child	-.01	-.32	8.48
Alone/total	.05	.25	5.52
With other young child/total	.01	-.23	4.68
Focus Child 2 (N = 158)			
With caregiver/total	-.29	-.29	7.45
Engages in language/information with caregiver	-.20	-.26	6.03
Engages in looking at a book	-.20	-.24	4.77

[*] Significant at $p < .05$. This means that the probability is less than 5 out of 100 that these relationships occurred by chance.

[†] Age mix:

0 = Unclassified
1 = Infants only
2 = Focus Child 1 only
3 = Focus Child 2 only
4 = School-age child only
5 = Infant and Focus Child 1
6 = Focus Child 1 and Focus Child 2
7 = Focus Child 2 and school-age child
8 = Infant to Focus Child 2
9 = Focus Child 1 to school-age child
10 = Infant to school-age child

The behavior of Focus Child 1 was affected significantly by the age mix of children in the home. Those children more often showed affection, sought attention, and exhibited more distress when the groups were more heterogeneous (see Table 71). The pattern is very similar to that of Focus Child 1 when several preschool children were present in the home. The toddlers tended to spend more time alone and were less involved with other children.

The behavior of Focus Child 2 was only slightly affected by the age mix of the children in the home. The preschool child spent less time with the caregiver doing language/information activities and less time looking at books when the group was heterogeneous. The greater the age mix, the more interactive these children seemed to be.

Average Age

The average age of the children in day care homes had an effect on caregiver behavior and, more particularly, on child behavior. As Table 72 indicates, the higher the average age of children in a home, the less helping and facilitating of physical needs by the caregiver. Older children were more likely to be independent and help themselves. Curiously, caregivers showed less affection when the average age increased; as reported in the previous section, infants received the most affection from caregivers. Perhaps active preschoolers were too busy to stop for hugs and kisses. Other forms of affection, such as a smile, that might be given to children were recorded on the observation instrument as positive affect.

The average age of the group affected the behavior of Focus Child 1 significantly on eight behavior variables. The older the group, the less affection, the less attention seeking, and the less distress exhibited by the toddlers. The pattern is almost identical to that seen when the age mix was greater.

Again, Focus Child 2 was only slightly affected by the average age of the group. Children of 3 and 4 years of age tended to engage in more gross motor activities when the average age was older (see Table 72).

Summary

In summary, the child behaviors were most often related to the number and ages of the children in the homes. The presence of more toddlers or

Table 72

SIGNIFICANT* RELATIONSHIPS OF AVERAGE AGE† OF CHILDREN TO CAREGIVER AND CHILD BEHAVIORS

Behaviors	r	Beta	F
Adult (N = 303)			
Helps Focus Child 1	-.24	-.53	18.24
Helps Focus Child 2	-.13	-.38	6.35
Helps/total	-.30	-.42	20.35
Facilitates affection with any child	-.21	-.31	9.18
Facilitates physical needs with Focus Child 1	-.21	-.51	17.33
Facilitates physical needs with Focus Child 2	-.16	-.34	5.35
Facilitates physical needs/total	-.29	-.40	18.03
Interacts with school-age child	.28	.24	5.51
Focus Child 1 (N = 247)			
Engages in affectionate behavior	-.08	-.29	4.70
In distress	-.16	-.49	13.51
Seeks attention of caregiver	-.07	-.33	6.29
Engages in physical needs while interacting with caregiver	-.09	-.30	4.92
Engages in conversation with young child	.11	.41	9.17
Alone/total	-.07	-.39	9.27
With other young child/total	.12	.44	11.76
With caregiver/total	-.03	-.26	4.74
Focus Child 2 (N = 158)			
Engages in gross motor activity	-.00	.28	3.96

---

*Significant at $p < .05$. This means that the probability is less than 5 out of 100 that these relationships occurred by chance.

†The average age of children, excluding infants and school-age children, was 34 months, and the range of age was approximately 4 years.

infants seemed to have a great impact on Focus Child 1 and somewhat less of an effect on Focus Child 2. The regulatory status of the homes related to only two child behaviors--albeit important ones: the toddlers expressed less affection in unregulated homes, and the preschoolers expressed more distress in unregulated homes. Importantly, caregiver characteristics such as age, experience, or education were not generally predictors of child behavior. The children's behavior varied in several ways from one city to another. However, the interactions with regulatory status and ethnicity made geographic findings difficult to interpret.

Structured Situations Compared with Natural Situations

The purpose of the two structured situations--the Play-Doh Factory and the Book--was to provide caregivers with similar opportunities to use teaching and socializing skills. Observation data from these structured activities permit comparisons of adult behaviors across homes. If the behavior of caregivers were the same during both the structured and natural observations, one might assume that equal opportunity to use teaching or socializing skills did not affect caregiver behavior. Further, it would indicate that the data gathered during the natural observations adequately reflected the caregiver's repertoire of skills.

Both structured situations are educational in nature. The caregiver is expected to teach a skill in the Factory situation and to use language to inform in the Book situation.

Observers presented the structured situations to each caregiver at the same time of day and in the same way. The instructions were brief and deliberately broad to allow caregivers some freedom in their approach to the task, yet give structure to the situation as a whole. Hence, the situations were controlled only to the extent that each caregiver used the same instructions, materials, and opportunity to interact with children.

The ABC observation instrument was used to record caregiver behaviors during the Play-Doh Factory situation as well as in the natural observations. The behaviors observed during the Book task were recorded on a tally sheet of behaviors. Only the data from the Play-Doh Factory were used in the correlations described below.

259

Play-Doh Factory

Correlations

Pearson product moment correlations were computed to examine the relationships between the natural observations and the Play-Doh Factory structured situation observations. Data from the 48 caregiver observation variables, collected in 215 homes, were used in these analyses. With such a large sample size, correlations can be low ($r = .11$) and still be significant at $p < .05$. However, correlations that are less than $r = .20$ identify less than 5% of the variance in common between the data sets. Therefore, only correlations that are .20 or greater are discussed.

The tables in this section follow the same order as the constructs for caregiver behaviors presented in Section II: socioemotional, teaching, participating, helping, facilitating activities, and variables related to time the caregiver is not involved with children.

Of the 13 socioemotional variables used in the correlation analysis, 11 were significant in the correlation between natural and structured situations. Table 73 shows that 10 of those correlations were $r = .20$ or higher. This indicates that the caregivers behaved similarly during the natural and the structured situation observations. For example, the caregivers who tended to be more directive during the normal course of the day were similarly directive when they presented the Play-Doh Factory to the children.

Table 74 presents correlations of caregivers' teaching, helping, and participating behaviors. Eleven of the 12 variables are significantly related, and 8 have an $r \leq .20$. The correlations for teach and participate are especially high, indicating that caregivers who naturally teach or participate with children the most often are most likely to use these behaviors in the structured situations.

Of the 14 facilitating variables presented in Table 75, 11 are significantly related, with 9 having $r \leq .20$. Caregivers who naturally stress language, provide information, or teach were most likely to do the same during the structured situation. It stands to reason that music/dance, television, or exploratory activities (the three variables not correlated), would not occur during the structured Play-Doh activity at rates similar to those that occur during the normal course of the day.

Table 73

CORRELATION OF CAREGIVERS' SOCIOEMOTIONAL BEHAVIORS OBSERVED IN NATURAL AND STRUCTURED SITUATIONS

N = 215

ABC Variables	r[*]	p[†]
12 Caregiver directs (do it or guide)	.53	.001
15 Caregiver converses - total	.26	.001
21 Caregiver facilitates pro-social behavior with any children	.40	.001
22 Caregiver facilitates affection with any children	.34	.001
23 Caregiver facilitates comfort with any children	-.02	NS
41 Caregiver interacts with a baby	.29	.001
42 Caregiver interacts with a school-age child	.77	.001
43 Caregiver expresses positive affection	.51	.001
44 Caregiver expresses negative affection	.41	.001
45 Caregiver controls - total	.39	.001
46 Caregiver controls dangerous situation	.07	NS
47 Caregiver controls antisocial situation	.34	.001
48 Caregiver strictly controls any children	.16	.01

[*] r = The correlation coefficient (see p. 213).

[†] p = The conclusion that some statistical result is "significant" means that the finding is unlikely to have arisen just by chance. The "p" value gives a more precise indication of this probability. Thus, in this case the p value of less than .001 indicates that the result would arise by chance less than once in 1,000 times. If the p value is greater than .05, the result has possibly arisen by chance, and is considered nonsignificant. This is shown in the table as NS (not significant).

Table 74

CORRELATION OF CAREGIVERS' TEACHING, PARTICIPATING, AND HELPING BEHAVIORS IN NATURAL AND STRUCTURED SITUATIONS

N = 215

	ABC Variables	r	p
1	Caregiver teaches C1 (Focus Child 1)	.62	.001
2	Caregiver teaches C2 (Focus Child 2)	.64	.001
3	Caregiver teaches - total	.44	.001
4	Caregiver plays/participates with C1	.56	.001
5	Caregiver plays/participates with C2	.62	.001
6	Caregiver plays/participates - total	.43	.001
7	Caregiver helps C1	.35	.001
8	Caregiver helps C2	.33	.001
9	Caregiver helps - total	.15	.01
38	Caregiver facilitates physical needs with C1	.17	.01
39	Caregiver facilitates physical needs with C2	.14	.01
40	Caregiver facilitates physical needs - total	.10	NS

Table 75

CORRELATION OF CAREGIVERS' FACILITATING ACTIVITIES IN STRUCTURED AND NATURAL SITUATIONS

(N = 215)

ABC Variables	r	p
24. Caregiver facilitates language/information with C1	.47	.001
25. Caregiver facilitates language/information with C2	.41	.001
26. Caregiver facilitates language/information--total	.23	.001
27. Caregiver facilitates structured fine motor with C1	.61	.001
28. Caregiver facilitates structured fine motor with C2	.51	.001
29. Caregiver facilitates structured fine motor/total	.34	.001
30. Caregiver facilitates dramatic play/total	.15	.01
31. Caregiver facilitates exploratory fine motor with any children	.08	-
32. Caregiver facilitates work with C1	.30	.001
33. Caregiver facilitates work with C2	.41	.001
34. Caregiver facilitates work/total	.38	.001
35. Caregiver facilitates music/dance--total	-.05	-
36. Caregiver facilitates gross motor activities with any children	.16	.01
37. Caregiver facilitates TV with any children	.02	-

Surprisingly, all five of the "Caregiver not involved with children" variables are significantly correlated. Four of these are correlated at r > .20, as shown in Table 76. The finding implies that some caregivers presented the Play-Doh Factory to the children and then retreated to their own activities, and these tended to be the same caregivers who spent more time alone during the natural situation.

Table 76

CORRELATION OF CAREGIVERS' NONINVOLVEMENT
IN STRUCTURED AND NATURAL SITUATIONS

N = 215

ABC Variables		r	p
16	Caregiver supervises and prepares for children	.29	.001
17	Caregiver converses with another adult	.21	.001
18	Caregiver involved in housekeeping	.24	.001
19	Caregiver involved in recreational activity	.28	.001
20	Caregiver not involved (out of range or room)	.15	.01

Regressions for Structured Situation

Regressions were computed for the Play-Doh Factory structured situation using the same procedures as those described for the natural observation data. Regression tables are presented in Appendix D. Of particular interest was how independent variables such as caregiver age, education, experience, and home status related to dependent variables such as teaching, participating, helping, and socializing. The question was whether these variables related similarly in the natural and structured observation data.

A comparison of the two data sets revealed only two overlaps in the significant relationships identified. During structured and natural observations, the caregivers exerted more control when more Focus Children 1 (the toddlers) were present. The second overlap was found in a relationship between unregulated homes and structured fine motor activities: Structured fine motor activities were facilitated less often in both natural and structured situations when the home was unregulated. (For these data, see variables ABC 29 and 45 in the natural and structured regression tables presented in Appendix D.)

Two variables--antisocial behavior and strict control--had no significant relationship in either set of data. The remaining variables related differently from structured to natural situations and were hopelessly embedded in a variety of site, ethnicity, or status interactions.

Caregiver education related significantly to caregiver helping, directing, and facilitating exploratory fine motor activities in the natural data, but it related only to the affection expressed in the structured situation. Caregiver age and experience had no significant relationship in the structured situation data.

Several interesting relationships were found between caregiver behaviors and home characteristics in the structured data. In homes where a child relative or caregiver's own child was present, more teaching, helping, language/information, and gross motor activities occurred. (See variables ABC 3, 9, 26, and 36 in structured situations, Appendix D.) These relationships are quite different from those identified in the natural observations.

To summarize, the correlations suggest that a great deal of similar behavior occurs during the natural and structured observations. The significant correlations are numerous and impressively high. If only these data were considered, it would seem that structured situations could be observed and that observation of natural situations could be eliminated, saving considerable data collector expenses. However, a comparison of results from the regression of the two data sets that hold independent variables constant indicated some differences in relationships. For example, caregivers seemed to behave differently in these two situations when their own children or child relatives were present. It may be that given a new game, the caregiver either offers a child relative a first chance or insists that the child relative let other children have the first chance. This might differ from natural everyday occurrences. Unfortunately, the regression results are difficult to compare and analyze because of the numerous site, ethnic, and status interactions. This complication makes it impossible to recommend observing only structured situations.

The Book*

Observers recorded any of seven teaching behaviors each time they occurred while caregivers showed the book to children. These behaviors appear in Table 77 and are reported in terms of frequency of occurrence. To compare how caregivers in different home status groups performed during this activity, an analysis of variance was computed. Data from the analysis of variance indicate that sponsored caregivers referred to feelings more often than regulated or unregulated caregivers (e.g., "How did the puppy feel? How would you feel?") and to children's own experience (e.g., "Does your puppy play with kittens?"). Regulated caregivers provided more corrective feedback ("No, that is a dog, not a cat"). Caregivers in all groups explained, elaborated, labeled, and encouraged responses by asking for information more often than they gave corrective feedback or referred to feelings. Thus, the profiles of the home status groups are similar.

The only difference among sites was in San Antonio. As Table 78 indicates, San Antonio caregivers referred to children's own experiences less often while showing the book and encouraged responses or asked the children for information less often.

Table 79 indicates that caregivers differed only slightly by ethnicity. White caregivers most often referred to the children's own experiences. Black caregivers most often encouraged children to respond or asked them for information about the story; they also gave more corrective feedback.

Homes Described by the Physical Environment and Nutrition Checklist and the Observation Summary

The Physical Environment and Nutrition Checklists and the Observation Summary were completed by observers in 204 homes in San Antonio and Philadelphia at the end of the morning. (Observers did not complete these instruments in Los Angeles.) On the Physical Environment Checklist, observers recorded the presence or absence of 29 items that describe safety factors, cleanliness, and child-appropriate play space, equipment and materials. On

---

*Because the independent variables such as caregiver education and experience and number of children were not held constant, these findings must be considered as tentative.

Table 77

MEANS AND STANDARD DEVIATIONS FOR THE BOOK TALLY BY STATUS

N = 254

Variable	Sponsored		Regulated		Unregulated		F
	$\overline{X}$[*]	SD	$\overline{X}$	SD	$\overline{X}$	SD	
Refers to feelings	1.81	3.01	1.15	1.92	.86	1.53	3.76[†]
Refers to experiences	2.53	3.21	2.33	2.87	1.41	1.92	3.77[†]
Encourages response/asks for information	11.65	7.83	10.76	6.82	9.87	8.12	1.09
Explains/elaborates/labels	19.64	11.52	18.20	8.24	16.41	8.50	2.30
Suggests/directs to specifics	8.87	5.62	8.12	5.15	7.12	4.98	2.20
Gives positive reinforcement/acknowledgment	5.51	3.59	6.28	4.26	5.12	4.92	1.68
Gives corrective feedback	.94	1.39	1.57	1.77	1.44	1.81	3.32[†]

---

[*] These numbers are mean frequencies of occurrence during the reading of the book.

[†] These F ratios are significant at $p < .05$.

Table 78

MEANS AND STANDARD DEVIATIONS FOR THE BOOK TALLY BY SITE

N = 254

Variable	Los Angeles		San Antonio		Philadelphia		
	$\overline{X}$*	SD	$\overline{X}$	SD	$\overline{X}$	SD	F
Refers to feelings	1.59	2.73	1.00	1.63	1.18	2.20	1.67
Refers to experiences	2.56	3.24	1.52	2.07	2.89	2.77	3.61†
Encourages response/Asks for information	11.75	7.88	8.18	6.77	13.03	7.17	9.92†
Explains/Elaborates/Labels	18.16	8.71	16.60	8.96	20.14	10.93	2.74
Suggests/Directs to specifics	8.76	6.44	8.16	3.92	6.86	4.97	2.56
Gives positive reinforcement/acknowledgement	5.86	4.14	5.19	4.54	6.14	4.16	1.06
Gives corrective feedback	1.05	1.56	1.52	1.79	1.47	1.70	2.10

*These numbers are mean frequencies of occurrence during the reading of the book.

†These F ratios are significant at $p < .05$.

Table 79

MEANS AND STANDARD DEVIATIONS FOR THE BOOK TALLY BY CAREGIVER ETHNICITY

(N = 254)

Variable	White		Black		Hispanic		
	$\bar{X}$*	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	F
Refers to feelings	1.42	2.13	1.06	2.74	1.25	1.74	.58
Refers to experiences	2.59	3.08	1.95	2.69	1.53	2.16	3.30**
Encourages response/Asks for information	10.72	7.37	12.39	7.68	8.93	7.35	3.94**
Explain/Elaborates/Labels	19.54	10.43	16.47	7.60	17.71	9.70	2.49
Suggests/Directs to specifics	7.47	5.13	7.96	5.64	9.04	4.98	1.89
Gives positive reinforcement/acknowledgement	5.14	3.63	6.49	4.53	5.60	4.88	2.29
Gives corrective feedback	1.09	1.55	1.75	1.86	1.24	1.64	3.62**

*These numbers are frequencies of occurrence during the reading of the book.

**These F ratios are significant at $p < .05$.

the Nutrition Checklist, observers recorded the kinds of food prepared for or served to children at specific meals during the observation day. The Observation Summary provided a subjective rating of the overall atmosphere of the home as determined by the observer's impression of certain specified caregiver and child behaviors. The three instruments are reproduced in Appendix B.

With the data available from the three instruments, 11 variables were constructed. Analyses of variance were computed to test differences among homes by status across and within sites.

The comparison of sponsored, regulated, and unregulated homes presented in Table 80 indicates that the sponsored and regulated homes provided a better physical environment and more nutritious food than did the unregulated caregivers. Nutritious food was rated for the 2 days of observation on the basis of presence or absence in the diet of fruit, vegetables, milk products, grain products, meat or fish or other protein, and vitamin supplements. However, unregulated homes provided fewer junk foods, defined by the presence in the diet of soft drinks, sweets, and salty snacks such as potato chips. Unregulated caregivers apparently provided less food over all.

Observers' impressions recorded on the Observation Summary indicate that sponsored and regulated caregivers seemed to enjoy their work more than unregulated caregivers. Enjoyment of work was rated on a three-point scale of (1) enjoyed it most of the time, (2) enjoyed it sometimes, and (3) enjoyed it not at all. More physical conflict between children was reported in the Observation Summary for regulated and sponsored homes than for unregulated homes. However, this finding was not substantiated by the observation data.

In San Antonio, as Table 81 shows, the sponsored and regulated homes provided a better physical environment than did unregulated homes. Similarly, more nutritious food was served in sponsored homes, followed by regulated homes, and the least nutritious food was provided in unregulated homes. According to the observers' ratings, unregulated caregivers enjoyed their work less than did the caregivers in sponsored or regulated homes in San Antonio.

In Philadelphia, few differences were found that could be attributed to home status. Table 82 shows that sponsored homes more often provided

Table 80

MEANS AND STANDARD DEVIATIONS FOR THE CHECKLISTS AND OBSERVATION SUMMARY BY STATUS

Variable	Number of Homes in Which the Variable Was Recorded	Sponsored (N = 49) Mean (SD)	Regulated (N = 78) Mean (SD)	Unregulated (N = 77) Mean (SD)	F	p
Physical Environment Checklist	204	22.980 (2.774)	23.314 (3.147)	21.292 (3.756)	7.984	.001*
Caregiver provides breakfast	204	.316 (.378)	.442 (.411)	.370 (.375)	1.660	.193
Caregiver provides morning snack	204	.857 (.250)	.795 (.306)	.727 (.385)	2.428	.091
Caregiver provides lunch	204	.653 (.357)	.654 (.397)	.533 (.408)	2.284	.105
Caregiver provides afternoon snack	204	.000 (.000)	.006 (.057)	.013 (.114)	.421	.657
Caregiver provides nutritious food	204	4.235 (1.885)	4.289 (1.788)	3.461 (1.418)	5.518	.005*
Caregiver provides junk food	204	.857 (.646)	.891 (.776)	.786 (.661)	.447	.640
Children engage in physical conflict	201	.633 (.796)	.896 (1.101)	.527 (.735)	3.308	.039*
Children are unhappy	202	.939 (.754)	1.000 (.639)	.842 (.763)	.942	.392
Caregiver is affectionate with baby	50	1.714 (.393)	1.768 (.441)	1.633 (.611)	.365	.696
Caregiver enjoys work	204	1.765 (.446)	1.808 (.344)	1.552 (.536)	6.958	.001*

*$p < .05$.

Note: The Observation Summary was completed only in San Antonio and Philadelphia.

Table 81

MEANS AND STANDARD DEVIATIONS FOR THE CHECKLISTS AND OBSERVATION SUMMARY BY STATUS--SAN ANTONIO

Variable	Number of Homes in Which the Variable Was Recorded	Sponsored (N = 16) Mean (SD)	Regulated (N = 49) Mean (SD)	Unregulated (N = 50) Mean (SD)	F	p
Physical Environment Checklist	115	25.281 (1.983)	23.929 (3.417)	21.330 (3.973)	10.653	.001*
Caregiver provides breakfast	115	.594 (.375)	.480 (.420)	.400 (.364)	1.589	.209
Caregiver provides morning snack	115	.906 (.202)	.867 (.245)	.800 (.335)	1.154	.319
Caregiver provides lunch	115	.719 (.315)	.663 (.413)	.500 (.391)	3.005	.054
Caregiver provides afternoon snack	115	.000 (.000)	.000 (.000)	.000 (.000)	--	--
Caregiver provides nutritious food	115	5.625 (1.756)	4.684 (1.701)	3.670 (1.373)	11.006	.001*
Caregiver provides junk food	115	.969 (.531)	.980 (.848)	.770 (.672)	1.115	.331
Children engage in physical conflict	115	.688 (1.015)	.949 (1.156)	.510 (.746)	2.512	.086
Children are unhappy	114	.938 (.704)	.917 (.639)	.770 (.816)	.612	.544
Caregiver is affectionate with baby	32	1.500 (.000)	1.714 (.489)	1.444 (.727)	.792	.463
Caregiver enjoys work	115	1.713 (.364)	1.786 (.368)	1.460 (.588)	6.565	.002*

*p < .05.

Table 82

MEANS AND STANDARD DEVIATIONS FOR THE CHECKLISTS AND OBSERVATION SUMMARY BY STATUS--PHILADELPHIA

Variable	Number of Homes in Which the Variable Was Recorded	Sponsored (N = 33) Mean (SD)	Regulated (N = 29) Mean (SD)	Unregulated (N = 27) Mean (SD)	F	p
Physical Environment Checklist	89	21.864 (2.402)	22.276 (2.332)	21.222 (3.383)	1.063	.350
Caregiver provides breakfast	89	.182 (.302)	.379 (.393)	.315 (.396)	2.408	.096
Caregiver provides morning snack	89	.833 (.270)	.672 (.361)	.593 (.439)	3.579	.032*
Caregiver provides lunch	89	.621 (.376)	.638 (.376)	.593 (.439)	.093	.911
Caregiver provides afternoon snack	89	.000 (.000)	.017 (.093)	.037 (.193)	.728	.486
Caregiver provides nutritious food	89	3.561 (1.565)	3.621 (1.761)	3.074 (1.446)	.987	.377
Caregiver provides junk food	89	.803 (.695)	.741 (.621)	.815 (.653)	.103	.902
Children engage in physical conflict	86	.606 (.682)	.804 (1.012)	.560 (.726)	.693	.503
Children are unhappy	88	.939 (.788)	1.380 (.625)	.981 (.640)	.680	.509
Caregiver is affectionate with baby	18	1.800 (.447)	1.929 (.189)	1.917 (.204)	.338	.718
Caregiver enjoys work	89	1.758 (.486)	1.845 (.302)	1.722 (.376)	.707	.460

$^*p < .05$.

morning snacks than did regulated homes, which in turn provided morning snacks more frequently than unregulated homes, but that is the only significant difference in the Philadelphia data.

These findings suggest that some form of sponsorship or regulation may enhance the physical environment of the home and the nutrition of children.

Description of Outlying Homes

In every large study, cases arise in which the findings are not representative of the larger sample but are of interest for that reason. In this study, some homes were selected for special attention because they exhibited caregiver behaviors that were atypical in some dimensions. The dimensions on which the selection was made are those representing the caregiver behaviors and activities included in the six domains described in Chapter III: socioemotional, teaching, participating, and helping behaviors; facilitation of activities; and noninvolvement with children. The home in which the proportion of observed caregiver behaviors was highest on each of the particular variables that formed each domain was identified for further description. In the following sections, these outlying homes are characterized by site; status; caregiver ethnicity, age, education, and experience; and number and age of children in the home. When applicable, observers' comments from Daily Logs are included to describe caregiver behaviors on the observation day in more detail. These data are interesting as illustrative of extremes, but the reader is cautioned against making generalizations regarding these examples and other caregiver situations.

Socioemotional Domain

The characteristics of each of the homes that had the highest percentages (of caregiver's overall time) on the variables that constitute the socioemotional cluster are presented in Table 83. The eight caregiver behavior variables describe a spectrum of caregiver affect ranging from positive to negative. In the following paragraphs, the characteristics of each home and caregiver are described by variable. A different home was identified for each of the eight caregiver variables.

Table 83

OUTLYING HOMES--SOCIOEMOTIONAL DOMAIN
N = 19

	Affection	Prosocial	Positive Affect	Total Direct	Total Control	Comfort	Negative Affect	Strict Control
Average for total sample (%)	1.7	1.3	5.3	3.7	3.7	0.5	0.3	0.2
Variable value*	18.4	10.7	41.8	18.4	13.9	11.2	4.8	3.3
Site	San Antonio	Philadelphia	San Antonio	San Antonio	San Antonio	Los Angeles	Philadelphia	San Antonio
Status	Unregulated	Unregulated	Sponsored	Regulated	Regulated	Sponsored	Sponsored	Regulated
Caregiver ethnicity	Black	White	Hispanic	Hispanic	Hispanic	Hispanic	White	White
Number of children	1	6	3	2	4	5	5	5
Caregiver age (years)	58	28	54	49	31	40	36	67
Caregiver experience (years)	3.5	1.75	7.75	19.5	2.75	0.41	11.75	15.75
Caregiver education	-HS	-HS	-HS	-HS	-HS	-HS	HS	-HS
Presence of infants	No	No	No	Yes	No	No	No	Yes
Presence of school-age child	No	No	No	No	No	Yes	No	No
Age mix†	2	6	6	5	6	9	3	8

*Percentage of frames recorded for this variable in this home.

†Age mix:

0 = Unclassified
1 = Infants only
2 = Focus Child 1 only
3 = Focus Child 2 only
4 = School-age child only
5 = Infant only and Focus Child 1
6 = Focus Child 1 and Focus Child 2
7 = Focus Child 2 and school-age child
8 = Infant to Focus Child 2
9 = Focus Child 1 to school-age child
10 = Infant to school-age child.

Affection

The highest proportion of caregiver time (18%) spent in affectionate behaviors was recorded in an unregulated home in San Antonio. The caregiver was a 58-year old Black woman who had less than a high school education and had been a caregiver for 3.5 years. On the day she was observed, the caregiver had in her charge only one child, who was between 12 and 35 months old. From the amount of affectionate behavior (kissing, hugging, joking) in which they engaged, it seems likely that caregiver and child were very fond of each other and, without distraction of other children, had many opportunities to give each other their undivided attention.

The observer's Daily Log contains this statement about the caregiver: "Caregiver was wonderful to be around. Caregiver shows a lot of affection, cuddles, and attends to child's physical needs. She does not specifically teach new skills or encourage language development, but she played a lot with the child."

Prosocial

Compared with an average of 1% for the total sample (see Table 83), 11% of the caregiver's time in one home was spent on facilitating children's prosocial behaviors such as sharing and taking turns. The caregiver was a 28-year old White woman in an unregulated home in Philadelphia. She had less than a high school education and nearly 2 years of day care experience. All six children in her care on the observation day were between 1 and 5 years of age. In her Daily Log, the observer described the children's behavior that day as "rambunctious" and said that the caregiver "seemed most concerned with teaching manners."

Positive Affect

Relative to other caregiver behaviors, the most positive affect (coded for laughing, smiling, and expressing enthusiasm) was observed in a sponsored home in San Antonio where 42% of the caregiver's observed behavior was accompanied by positive affect. The cheerful caregiver was a 54-year-old Hispanic woman. She had been providing day care for nearly 8 years and had less than a high school education. When the home was observed, three children were present, all of whom were between 1 and 5 years old.

The following comments about the caregiver and the children are taken from the observer's Daily Log:

> The children get along well. [The caregiver] showed some affection to all the children. Caregiver made me feel comfortable in her home. The children seemed quite at ease, especially because they had their special room that was both comfortable and cozy. She told me she enjoys her work and gets lots of support from her husband (he has made desk, chairs, and goes to garage sales for educational toys).

Total Direct

The amount of direction that caregivers give to children is included in this cluster as an indicator of the socioemotional climate of the home. Whereas the average for all caregivers in the study was 3.7% (see Table 83), one caregiver spent 18% of her time directing children to different activities or suggesting ways to spend their time. She was a 49-year-old Hispanic woman who cared for one infant and one child between 12 and 35 months old in her regulated day care home in San Antonio. She had not finished high school but had almost 20 years of experience as a caregiver. After her day's observation, the observer made the following comments about the caregiver: "Caregiver didn't seem to enjoy her work. I often felt that the children were a bother to her and she would at times call upon her husband or son to 'take care of them.' I did not sense much warmth or affection toward the children."

Total Control

The fifth variable included in the socioemotional cluster is the total amount of routine (as opposed to strict) control behaviors used by the caregiver. As Table 83 shows, the home in which the highest proportion of "don'ts" or "nos" was used (14%) either with or without an accompanying explanation, was regulated and was located in San Antonio. The 31-year-old Hispanic caregiver had less than a high school education and nearly 3 years' experience as a day care provider. At the time she was observed, she cared for four children, all of whom were between 1 and 5 years old.

Comfort

The comfort variable is difficult to place accurately in a range of behaviors from positive to negative. Although comfort implies caregiver behavior that is warm and supportive, the code is defined such that it is recorded only when the caregiver is responding to a child in distress. Thus, a home in which the caregiver frequently engages in comfort-giving behaviors is also a home in which children frequently evidence distress. Among the 303 caregivers in the major observation study, the one who engaged in comfort-giving behavior most frequently (11% of her time) was an Hispanic woman from Los Angeles, who was 40 years old and had less than a high school education. When the Los Angeles observations were conducted, she had less than 6 months of day care experience and was caring for five children. Four of the children were between 1 and 5 years old; the fifth child was over 5 years of age.

Negative Affect

The highest percentage (4.8%) of negative affect, characterized by anger, disgust, sarcasm, and the like, was recorded in a sponsored home in Philadelphia (see Table 83). The 36-year-old White caregiver had finished high school and had been a day care provider for almost 12 years. On the day she was observed, five children were in the home, all of whom were 3 or 4 years old. The observer made the following comments about this caregiver in her Daily Log:

> Caretaker seemed to have a very negative attitude in dealing with the children. She commented that this instilled discipline and respect in the children; however, the children reflected this negative behavior in their dramatic play. Caretaker rarely watched or participated in children's activities--spent most of her time on the phone, doing her hair and nails, and doing laundry. She attended to the children's immediate needs but otherwise allowed them a free rein.

Strict Control

A 47-year-old White woman from San Antonio spent 3% of her time using strict, harsh, or punishing control methods with the children. She had less than a high school education and had been a caregiver for almost 16 years. On the day she was observed, she was caring for five children, the youngest of whom was an infant and the oldest less than 5 years of age. The observer's comments about this caregiver were as follows: "Caregiver had to control children an awful lot. She paid a lot of attention to the baby--it seemed like she gave more time to the baby than to all of the other kids."

Teaching Behaviors

The teach variable includes many behaviors that, for purposes of this study, were defined as instructional. These behaviors include demonstrating how something works, labeling objects, encouraging children to respond, giving information and feedback, and providing instructions for performing a specific task or activity. Table 84 shows that the highest percentage (61%) of teaching behaviors was recorded in a sponsored home in San Antonio. Interestingly, this is the same home in which the most positive affect was expressed by the caregiver. The Hispanic caregiver was 54 years old and had less than a high school education. She had almost 8 years of day care experience. When she was observed, she was caring for three children whose ages were between 1 and 5 years. The Daily Log includes these additional comments about this caregiver: "She has a special room for the children and daily schedules that include learning and developmental skills and tasks (e.g., cutting, beading, tracing). Caregiver is apparently with EODC* and has obtained nice equipment to aid her. She attends workshops as well."

Participating Behaviors

The plays/participates code was recorded when the caregiver was observed as an equal participant in the children's activities. Caregivers in the total sample spent an average of 7.8% of their time playing and participating with the children. In one sponsored home in Philadelphia, however, nearly 50% of the caregiver's time was spent in this way (see Table 84). The White caregiver had 2.5 years of day care experience. She was 46 years old and had less than a high school education. A single child, whose age was between 12 and

---

*EODC is a community action agency that offers services to caregivers in San Antonio sponsored homes.

Table 84

OUTLYING HOMES--TEACH, PLAY/PARTICIPATE, AND HELP

N = 19

	Total Teach	Total Play/ Participate	Total Help
Total sample average (%)	13.9	7.8	8.9
Variable value*	60.6	49.2	30.7
Site	San Antonio	Philadelphia	Los Angeles
Status	Sponsored	Sponsored	Sponsored
Caregiver ethnicity	Hispanic	White	Hispanic
Number of children	3	1	5
Caregiver age (years)	54	46	40
Caregiver experience (years)	7.75	2.5	0.41
Caregiver education	-HS	-HS	-HS
Presence of infants	No	No	No
Presence of school-age child	No	No	Yes
Age mix†	6	2	9

*Percentage of frames recorded for this variable in this home.

†Age mix:

0 = Unclassified
1 = Infants only
2 = Focus Child 1 only
3 = Focus Child 2 only
4 = School-age child only
5 = Infant only and Focus Child 1
6 = Focus Child 1 and Focus Child 2
7 = Focus Child 2 and school-age child
8 = Infant to Focus Child 2
9 = Focus Child 1 to school-age child
10 = Infant to school-age child.

35 months, was present on the observation day. The presence of only one child may be a reason why the caregiver was able to spend so much time in children's activities.

Helping Behaviors

In this study, the help code included such behaviors as pushing a child on a swing, serving food, and lifting a child to a chair. Table 84 shows that caregivers overall spent an average of 8.9% of their time giving physical assistance to the children in their care. In comparison, 30% of the caregiver behaviors recorded in a sponsored home in Los Angeles were coded as helping children. Five children, whose ages ranged from 12 months to 13 years, were present on the day the Hispanic caregiver was observed. Because help was also coded with comfort, it is not surprising that the highest proportions of both help and comfort were attributable to the same caregiver.

Facilitation of Activities

Language/Information

Language activities were defined for this study as those that center on labeling, reading, counting, and other verbal skills. Information activities were defined as those that promote learning of nonroutine information, such as explanations of why and how things occur. As Table 85 shows, a White, sponsored caregiver in Philadelphia was recorded as having spent 46% of her time in facilitating language/information activities. She was 38 years old, had a high school education, and almost 8 years of experience as a caregiver. The language and information activities she promoted were for the benefit of the one 3- or 4-year-old child in her care. The observer's Daily Log states, "I feel the caregiver really enjoyed her work and was probably responsible for a major portion of the child's learning experiences. She stated that she gave him more than she would another child because she felt that he was a little slow."

Structured Fine Motor

A little more than 25% of the caregiver behaviors recorded in a sponsored home in Philadelphia were attributed to facilitating structured fine

Table 85

OUTLYING HOMES--FACILITATION OF ACTIVITIES CONSTRUCT
N = 19

	Language/ Information	Structured Fine Motor	Dramatic Play	Exploratory Fine Motor	Work	Physical Needs	TV
Average for total sample (%)	8.9	4.1	1.0	1.0	1.3	8.4	2.3
Variable value*	46.1	25.3	10.0	14.1	10.0	28.8	30.6
Site	Philadelphia	Philadelphia	Philadelphia	Los Angeles	Philadelphia	Los Angeles	Philadelphia
Status	Sponsored	Sponsored	Unregulated	Sponsored	Regulated	Regulated	Unregulated
Caregiver ethnicity	White	White	White	White	Black	White	Black
Number of children	1	1	11	4	10	4	1
Caregiver age (years)	38	46	64	50	43	57	37
Caregiver experience (years)	7.75	2.5	27.5	15.9	5.5	12	3.75
Caregiver education	HS	-HS	HS	-HS	-HS	-HS	-HS
Presence of infants	No	No	Yes	Yes	Yes	No	No
Presence of school-age child	No	No	No	No	Yes	No	No
Age mix†	3	2	8	5	10	6	2

*Percentage of frames recorded for this variable in this home.

†Age mix:

0 = Unclassified
1 = Infants only
2 = Focus Child 1 only
3 = Focus Child 2 only
4 = School-age child only
5 = Infant only and Focus Child 1
6 = Focus Child 1 and Focus Child 2
7 = Focus Child 2 and school-age child
8 = Infant to Focus Child 2
9 = Focus Child 1 to school-age child
10 = Infant to school-age child.

motor activities (see Table 85). The 46-year-old White caregiver was described earlier in the section on playing and participating behaviors. It would appear that she played with the one child in her care in activities that involved the eye-hand-spatial coordination that characterizes structured fine motor activities such as fitting, stacking, sorting, and drawing.

Dramatic Play

Facilitation of dramatic play accounted for 10% of the caregiver behaviors recorded in an unregulated home in Philadelphia where a 64-year old White woman cared for 11 children under 5 years of age. Several of the children were infants and, according to the observer's log, "were sleeping upstairs during the entire observation." The caregiver had evidently learned to cope with large numbers of children during her 27 years of day care experience. The observer noted, "Caregiver was consistent and firm with the children and attended to each one's physical needs. She encouraged them to share with each other. During story-telling time, she engaged in dramatic play with the children."

Exploratory Fine Motor

The exploratory fine motor code was used to record less precise small muscle activities than the structured fine motor activities described previously. The code includes sand and water play, rubbing, squeezing, and banging. Table 85 shows that 14% of the observed caregiver behaviors in a sponsored Los Angeles home were recorded as facilitating these kinds of fine motor activities. The White caregiver had four children under 36 months of age in her charge. She was a 50-year-old woman with less than a high school education and 16 years of experience in day care. The observer noted that "observing in the home was a pleasure," that the caregiver "was well suited to care for such young children and provided age-appropriate activities and materials for them."

Work

It is not surprising, perhaps, that there were 10 children ranging in age from infant to school age in the home where the highest percentage (10%)

of recorded caregiver time was spent in promoting children's work activities. This regulated Philadelphia home was run by a Black caregiver of 43 years of age with almost 6 years of day care experience. Although the observer does not mention that the children helped with setting the table, putting away materials, or other work that was done, she does say that "the caregiver and her daughter were very well organized and, considering the number of children, the noise level was surprisingly low."

Physical Needs

Almost 29% of the total caregiver behaviors recorded in one regulated Los Angeles home were coded as facilitating physical needs, e.g., feeding, grooming, and dressing children. The 57-year-old White caregiver had less than a high school education and had 12 years of day care experience. Four children between 1 and 5 years of age were present during the observations. The observer's Daily Log adds no further information about the caregiver or the children.

Television

The home that registered the highest proportion (31%) of caregiver time spent facilitating the watching of TV was unregulated and located in Philadelphia. The Black caregiver was 37 years old, and had less than a high school education, and had almost 4 years of experience as a day care provider. Only one child of 1 or 2 years of age was present on the observation day. The observer's Daily Log states: "Caregiver was apparently not well. She fell asleep (for about a half-hour), waking once to ask the child if he was wet. While she slept, the child stayed right next to her." Although nothing further was said about the caregiver or home, it seems safe to assume that caregiver and child sat together watching television for a good part of the morning.

Noninvolvement with Children

All activities in which the caregiver was not interacting with children, such as supervising and preparing their activities, conversing with other adults, and housekeeping are included in this cluster. Characteristics of the homes in which caregivers engaged in these activities most frequently are presented in Table 86.

Supervising/Preparing Children's Activities

More than 50% of one caregiver's time was recorded in supervising and preparing children's activities. This 58-year-old White caregiver was observed in a regulated home in Los Angeles. Eight children were present on the observation day. The youngest of the eight children was under 12 months old and the oldest was over 5 years. Unfortunately, the observer's Daily Log tells us nothing more about the caregiver or children.

Conversation with Adult

A Black caregiver in an unregulated San Antonio home accounted for the highest proportion (54%) of time spent in conversation with another adult. A high school graduate, this 33-year-old caregiver had more than 13 years of experience as a day care provider. On the observation day, the caregiver had four children in her charge; their ages ranged from under 1 to over 5. The observer's Daily Log states, "She was nice, but her focus was not on interacting with the children. She talked on the phone a lot and a friend came over and curled her hair."

Housekeeping

As Table 86 shows, 67% of one caregiver's observed behaviors were recorded in housekeeping activities. This occurred in the unregulated home of a 37-year-old Hispanic caregiver in San Antonio. One of the three children present on the observation day was between 12 and 35 months; the other two were of school age. The caregiver had less than a high school education and 4.5 years of day care experience. The observer made the following comments in her Daily Log: "Caregiver did not involve herself with the child. She says she likes caregiving, but didn't talk to, play with, or teach the child a thing."

Recreational Activities

A Black caregiver in a sponsored home in Los Angeles was observed 66% of the time in her own recreational or relaxation activities. She had less

Table 86

OUTLYING HOMES--NONINVOLVEMENT WITH CHILDREN CONSTRUCT
N = 19

	Supervise/ Prepare for Children	Conversation with Adult	Housekeeping	Recreation Activity
Average for total sample (%)	16.5	6.3	19.4	7.8
Variable value*	53.8	53.9	67.5	66.3
Site	Los Angeles	San Antonio	San Antonio	Los Angeles
Status	Regulated	Unregulated	Unregulated	Sponsored
Caregiver ethnicity	White	Black	Hispanic	Black
Number of children	8	4	3	3
Caregiver age (years)	58	33	37	38
Caregiver experience (years)	6.3	13.5	4.5	.99
Caregiver education	HS	HS	-HS	-HS
Presence of infants	Yes	No	No	Yes
Presence of school-age child	Yes	Yes	Yes	No
Age mix†	10	9	9	8

*Percentage of frames recorded for this variable in this home.

†Age mix:
0 = Unclassified
1 = Infants only
2 = Focus Child 1 only
3 = Focus Child 2 only
4 = School-age child only
5 = Infant only and Focus Child 1
6 = Focus Child 1 and Focus Child 2
7 = Focus Child 2 and school-age child
8 = Infant to Focus Child 2
9 = Focus Child 1 to school-age child
10 = Infant to school-age child

than a high school education and less than a year of day care experience. One infant and two children between 36 and 59 months of age were present on the day the caregiver was observed. The observer made the following comments in her Daily Log: "Caregiver complained that she had a terrible headache.... She just watched TV without interacting with the kids. After 11:00, she just sat on the couch sewing or else talked on the phone."

Summary of Characteristics of Outlying Homes

Clearly the outlying homes are not representative of the larger sample of day care homes, and these findings cannot be generalized to other homes. Nevertheless extremes are interesting to study and provide a more complete description of family day care than if we only use the average for all homes.

San Antonio and Philadelphia were each represented by eight outlying homes and Los Angeles by six. The eight San Antonio homes accounted for the highest proportion of time spent on five of the eight socioemotional variables; the eight Philadelphia homes accounted for the highest frequencies on six of the eight facilitation of activities variables. Some of the high frequencies were supported in the total data set regression analyses, which indicated that San Antonio caregivers did more total directing and controlling of children and that Philadelphia caregivers facilitated more activities than did caregivers in other locations.

Sponsored outlying homes had the highest proportions of teaching, helping and participating behaviors, as well as facilitation of language/information, structured fine motor, and exploratory fine motor activities. Regulated outlying homes accounted for the highest percentages of direct, routine control, and strict control measures and of facilitating work and physical needs activities. The caregivers in the unregulated outlying homes were highest on affection and on facilitating prosocial, dramatic play, and TV activities. The findings concerning the regulated and unregulated outliers differed substantially from the findings of the regression analysis.

White caregivers' frequencies were highest overall on negative affect and strict control; play/participate; facilitating prosocial; language/information, structured fine motor, dramatic play, exploratory fine motor, and physical needs activities; and supervising and preparing for children's activities. Black caregivers accounted for the highest frequencies of affection, facilitating work and television, conversation with adults, and recreational activities. The Hispanic caregivers were highest on positive affect, direct, comfort, routine control, teach, and help behaviors and housekeeping. The ethnic differences reported in the sample of outliers was not reflected in the regression results for the total sample. In the latter data set, Black rather than Hispanic caregivers were found to do more directing.

When five or more children were present, outlying homes were highest on the following caregiver behaviors: comfort, negative affect, strict control, help, facilitating work, and supervising and preparing for children. Homes that had from one to four children were highest on affection and positive affect, accounted for the largest proportions of teaching and participating behaviors and for the highest frequencies of facilitating all activities other than work. Analyses of data for the total sample were conducted by specific age groups; therefore, no comparison can be made of outliers and total homes as to the number of children present.

Outlying caregivers of 50 years of age or more accounted for the most affection and positive affect; the most teaching; facilitating most dramatic play, exploratory fine motor, and physical needs activities; and supervising and preparing for children most often. Caregivers under 40 were responsible for the highest frequencies of conversation with adults, housekeeping, and caregiver recreational activities. The average age of the caregivers was 44.7 compared with an average age of 43 for the total sample.

In years of caregiver experience, the median was 7.75 years. Average experience for the total sample of 303 caregivers was 7 years. Fourteen of the 19 outlying caregivers had less than a high school education. This is consistent with the education level of the majority of caregivers in the study.

At least one infant was present in 6 of the 19 outlying homes; 5 homes had at least one school-age child present on the observation day. The two homes in which both infants and school-age children were represented were highest on supervising and preparing for children and on facilitation of children's work activities. The outlying homes in which caregivers provided care only for children of 1 and 2 years of age were highest on caregiver affectionate and play/participate behaviors and on facilitation of structured fine motor and television activities. The homes in which caregivers provided only for children of ages 3 and 4 showed the highest percentages of negative affect and language/information activities. In those homes where both age groups (but no infants or school-age children) were represented, the frequencies were highest on positive affect, routine control, teach, and facilitation of prosocial and physical needs activities.

As interesting as the findings are, great caution must be used in assigning value to the findings of the outlying homes. Each of the nineteen variables is represented by only one home. Confidence in the findings is increased in those cases where the outlier findings are similar to the findings from the regressions.

IX SUMMARY AND CONCLUSIONS

The NDCHS observation component was primarily intended to describe a wide range of family day care homes and to portray the experience of children within those homes. The second task was to provide data bearing on six central issues regarding family day care, that is, to identify the effects on caregiver and child behavior of (1) home regulatory status, (2) number and age mix of children, (3) caregiver training or education, (4) caregiver experience, (5) caregiver ethnicity, and (6) project region. The use of a carefully developed, statistically reliable observation instrument (the Carew/SRI Observation System) enabled us to obtain these data. The following sections summarize and discuss findings from the observation study and relate the findings to data from other studies of family day care.

Descriptive Findings

Caregiver and child behaviors were studied in 303 homes.* This sample included Black, White, and Hispanic homes as well as regulated, unregulated, and sponsored homes. Sponsored homes are affiliated with a network that is usually associated with a child advocacy group or a government agency. Sponsorship takes many forms, but most networks refer parents seeking child care to the caregiver and many provide caregivers with child care information or training. No previous studies of family day care have examined the wide range of homes included in the NDCHS. This broad sample provides a fairly representative description of family day care in the three geographical locations selected for the study--Los Angeles, San Antonio, and Philadelphia.

---

*It is important to note that the sample of homes available to the observation component is a subset of the homes described by Abt Associates, Inc., in Volume II of the NDCHS Final Report. Characteristics (age, years of experience) of the 303 caregivers who agreed to be in the observation study are somewhat different from those of the total group of caregivers interviewed for the NDCSH.

Characteristics of the Caregiver and the Home

In average age, caregivers in the NDCHS observation component resemble caregivers in other studies of family day care. The average age of the 303 caregivers in this sample was 43, and the standard deviation was 13.42. These figures are comparable to those reported by others. For example, Colbert and Enos (1978) reported that 56% of their sample was over age 35, and Sale (1972) reported that caregivers in that project ranged in age from 20 to 69. Family day caregivers seem to be, on the average, in their late thirties or early forties, and they are not predominantly the young mothers caring for their own infants at home as has so often been assumed. Thirty-nine percent of the caregivers in the NDCHS had one or more of their own children in their care. One-third of the homes provided care for infants (i.e., children up to 12 months old).

The caregivers observed averaged 7 years of child care experience, with a standard deviation of 6.87. The range of experience was actually from 1 month to 36 years. This great variability may explain the slight discrepancy between the figures reported by the NDCHS and the lower experience levels reported in the family care studies of Emlen (1977; average, 5 years), Howes and Rubenstein (1978; average, 3.9 years), and Hall and Weiner (1977; average, 4.3 years).

Average education is consistent with that reported in other studies. NDCHS caregivers tended to have just under 12 years of education, and the standard deviation was only 2.4. Although some caregivers had some college education, very few had finished college. This variable appears to be quite stable across family caregivers in other studies. Hall and Weiner (1977) reported the average education of caregivers as 10.9 and 11.8 years for unlicensed and licensed homes, respectively, and none of the caregivers studied by Colbert and Enos (1978) had a college degree.

The regulatory status of homes showed certain relationships to caregiver and child characteristics. Regulated homes (sponsored and licensed or registered) tended to have more infants and more experienced caregivers. Unregulated homes tended to have more children who were related to the caregiver. These data might support a picture of unregulated family day care as an informal system whereby aunts and grandmothers care for their relatives' children, whereas regulated caregivers tend to view family day care as a business in which they have gained experience over several years. Sale (1972) reported that many caregivers are not aware of the need to obtain a license. It might be that caregivers with more experience learn about the necessity and desirability of becoming licensed. Emlen (1977) found that the most long-lasting relationships between caregiver and child existed in cases where the caregiver and parents were not close friends. In Emlen's study, the caregivers with more successful long-term relationships tended to view the provision of care as a business. They obtained a license and therefore stayed in business for a longer period. In our study, caregivers who were relatives of the children in their care tended to stay in business longer.

Caregiver Behavior

An important finding was that caregivers in the NDCHS were providing a positive and supportive environment for children. Ninety-four percent of the caregivers manifest some positive affect (recorded for smiles, laughs, and expressions of enthusiasm) compared with 31% manifesting negative affect (scowls, frowns, expressions of anger). Negative affect occurred only 0.3% of the observed time, whereas positive affect occurred 5% of the time. The positive affect variable has not been observed directly in most prior studies of family day care. Howes and Rubenstein (1978) observed behaviors related to positive affect; they found no differences between the rate of those behaviors in family day care and center care. Peters (1972) rated homes on amount of physical contact (e.g., hugging, caressing, holding) between caregivers and children, a variable that may be construed as indicative of positive affect; 29% were rated as high, 38% were moderate, and 33% were minimal. Although child care advocates, parents, policymakers, and educators generally agree about the desirability of a positive and supportive environment, this rather elusive domain has rarely been defined or studied.

Another important finding to emerge from the NDCHS is supported by other studies: total routine control (i.e., "No!" and "Don't!") was observed to occur in 96% of the homes, and directing behaviors (i.e., directing children to activities) were observed in 97% of the homes. These two behaviors were second in occurrence to positive affect, each being observed 4% of the time. Prescott (1973) found that "pressure" behaviors (efforts to control children) were observed more often in family day care than in open-structure centers or in children's own homes. Cochran (1977) found family day care higher than centers on supervising and "do's and don'ts." Howes and Rubenstein (1978) found more restrictive or negative behavior in family day care than in centers. The research to date indicates that family day caregivers exhibit a fair amount of controlling behaviors and in this regard may be different from center caregivers.

These findings must be qualified by noting that strict (harsh or punishing) control occurred in only 0.2% of the observation periods. When the findings regarding positive affect are taken into account, day care homes appear to be environments characterized by a combination of positive support and control, a combination that Baumrind (1967) found predictive of well-socialized and competent children.

Caregivers spent approximately 50% of their time interacting with children in some way. The most frequent type of interaction was some form of teaching. In fact, 14% of the total observed time was occupied by teaching; caregivers were observed to manifest some form of teaching in 98% of the homes. Cochran (1977) found that family day caregivers were significantly more often engaged in cognitive/verbal interactions with children than were center caregivers. The high proportion of teaching time in the NDCHS lends support to the notion that family day care may be a more educational environment than was previously assumed. This observation is particularly interesting in light of the data reported by Hall and Weiner (1977) that family caregivers apparently do not perceive themselves as offering educational services. Peters (1972) reported observing school-related formal lessons in only 8% of his sample of 143 homes. The NDCHS defined teaching more broadly than formal lessons; included are all acts of teaching, whether they were related to social, cognitive, or physical development. This more inclusive definition may explain the differences in the findings regarding teaching activities in our study and findings in other studies of day care.

Other caregiver behaviors of high frequency in the NDCHS were playing/participating and conversing with children (13%) and facilitating language/information and physical needs activities (each 9%). Cochran (1977) found more caregiver-child interaction involving play in family day care homes than in center care. The facilitation of language activities is positively correlated with the teaching variable reported above, and again Cochran's findings regarding the relatively high proportion of cognitive-verbal interactions in family day care are similar to these findings.

As in most homes of mothers with their own children (Carew, 1978), caregivers in our study spent approximatley 50% of their time in activities where they are not directly involved with children. A considerable amount of this time (17%) was spent in preparing food or play activities for the children or in monitoring their play. Another 19% of time was spent in household tasks such as cleaning, washing clothes, making beds, or sewing. Very little time was spent with other adults (6%) or in leisure activities, such as reading books or watching television alone (8%). The caregivers were actually out of range of the children only 1% of the time. Data reported by Peters (1972) indicate that one-third of the caregivers in his sample divided their time equally between interacting with the children and doing something else. Although family caregivers may spend about half their time involved with something other than direct interactions with children, prior research nonetheless suggests that they spend more time with individual children than do center caregivers. Prescott (1973), Cochran (1977), and Howes and Rubenstein (1978) all found a greater amount of adult input and one-to-one caregiver-child interaction in family day care than in centers.

Children's Behavior

Besides caregivers, the NDCHS observations focused on children of two age groups. Focus Child 1 represented children 12 to 35 months old (i.e., toddlers, 1 to 3 years old), and Focus Child 2 represented children 36 to 59 months old (i.e., 3- to 5-year olds, referred to as preschoolers). Children of both age groups were found to play with sand, water, paint, dough, and other exploratory materials more often than they engaged in any other activities. This occurred 22% of the observed time for the toddlers and 15% for the preschoolers. This finding is similar to that of Prescott (1973). She found that children in family day care did more tactile-sensory exploring than children in centers and own homes. Cochran (1977) also found that children in family day care explored more with materials than center children, and that more caregiver-child interactions were exploratory in nature.

The observed preschoolers spent 10% of their time in fine motor structured activities such as working puzzles, while the 1- and 2-year-olds spent only 6% of their time on such structured activities. This trend of more exploratory activities for the very young child and more structured activities for the older child seems to conform with normal child development patterns.

Another important finding was an increase in the importance of peers as the child grows. The preschoolers manifested more involvement with another child (5%) than did the toddler (2%). The preschooler talked more with other children, played alone less often, and was involved less often with the caregiver. The importance of peers in center day care was recently described by Rubenstein and Howes (1979). It is reasonable to believe that family day care offers similar advantages over own-home care in this regard by virtue of the presence of peers in the group. Howes and Rubenstein (1978) found more positive social skills among family day care children than among center children, suggesting that perhaps the family day care arrangement offers an optimal number and type of peer relationships for the development of these skills.

Children spent little time watching television (6 to 8% of the observation period), although the activity of watching television was observed in the majority of homes. Peters (1972) reported that some television-watching was observed in only 39% of his sample. It would appear that family day care homes do not match the stereotype often drawn of the caregiver busy with other things while the television "babysits" the children.

Children helped themselves with their physical needs (they dressed, fed, and toileted themselves) more often than they were assisted by the caregivers. The trend was greater for older than for younger children, suggesting natural development toward independence.

Overall, children spent a considerable portion of the observation period playing by themselves. The toddler was observed as playing alone 62% of the time, and the preschooler played alone 52% of the time. An explanation of this is that children who were engaged in activities independently (with blocks, trucks, dolls) were coded as alone. The adult was in most cases present (ironing clothes or washing the dishes) but not directly involved with the child. It seems that the caregiver had arranged an environment in which children could operate independently and happily since very little distress was observed.

In summary, family day care homes appear to be places where caregivers spend about half their time directly involved with children and the majority of that time is devoted to teaching or conversing or playing with children. Individual children spend most of their time using manipulative toys or exploratory materials and in language-related activities. The children seem to be involved in activities considered normal for their ages. Much of the child's time is spent in independent activities in an atmosphere that is generally positive and supportive. The caregiver does not hesitate to direct and control children's behavior but she does so in a manner that is mild, not harsh.

Findings Related to Study Questions

The remainder of the findings are organized according to the six study questions presented in the Introduction.

1. Do differences exist in caregiver and child behaviors among unregulated, regulated, or sponsored homes? The issue is whether regulations or training programs affect the kinds of experiences children have.

Some interesting findings emerged regarding the regulatory status of homes. When all other independent variables were held constant, caregivers in sponsored and regulated homes provided more help and were more often involved with children in structured fine motor and music and dance activities. They also conversed more often with the 3- and 4-year-old children than did caregivers in unregulated homes. Data from two checklists indicated that sponsored homes tended to provide a safer physical environment and more nutritious food.

Our analysis showed that regulatory status of the home was related to some child behaviors. In unregulated homes, the 1- and 2-year-old children tended to be less affectionate and the 3- and 4-year-old children showed more distress than in the sponsored or regulated homes. The younger children tended to look at books and to watch educational television more in regulated homes than in other homes.

It is apparent that regulatory status means different things in different sites and to different ethnic groups. In San Antonio, for example, sponsored caregivers did twice as much teaching as did regulated and unregulated caregivers. Regulated and unregulated homes in San Antonio showed definite similarities. This may result from the fact that homes in San Antonio are not licensed but registered, and registration requirements are not as stringent as licensing requirements. The effect of registering homes on caregiver behavior appears to be slight. This finding is noteworthy in light of the trend toward registration. States may be able to save money by registering homes rather than licensing them, but the possible effects should be considered. Further study in this regard is needed. Nevertheless, it seems important to clarify the objectives of registering before embarking on that course.

The effect of regulatory status on certain caregiver and child behaviors and the environment indicates that some form of regulation is desirable. We found that sponsored homes had safer physical environments and provided more nutritious food. This is an important result because regulation and licensing have generally been concerned with precisely these aspects of the day care environment.

No past research has been conducted on the effects of regulatory status to aid interpretation of the NDCHS findings. Researchers in future studies will need to identify the critical features of regulatory status as a variable.

2. How do the number and age mix of children in the homes relate to the kinds of experiences children have in day care homes? The issue is whether caregiver and child behaviors fluctuate in accordance with these characteristics.

The number and age mix of children in the home were associated with complex patterns of child and caregiver behaviors. When infants were present, caregivers tended to do less teaching, playing, and watching television with the other children. The 1- and 2-year old in turn sought attention less, was alone more often, and interacted less often with the caregiver, but the young child also did more monitoring--suggesting that when infants are present, they may watch the caregiver-infant interaction. The amount of time children spent with peers increased as the caregiver became more involved with infants. The children made more attempts at controlling each other. Obviously, the caregiver has less time for the other children when an infant is present, and thus the children play by themselves or occupy themselves with their peers. This is not to suggest, however, that the home loses its warmth when infants are present; in fact, caregivers in homes with infants show more positive affect.

A slightly different picture emerged as the number of children aged 12 to 35 months increased. In these homes, caregivers were more directive and less likely to provide messy materials like paint, water, or dough. Children in these situations tended to play with their peers more often but made more attempts to control them, were more antisocial, and showed less affection. Interestingly, less distress was evidenced, suggesting that the children can handle the situation.

The findings suggest that children become a little more unruly in homes with several 1- and 2-year olds, and the caregiver spends more time controlling their behavior and less time engaged in developmental activities with the children.

When several preschoolers were present, the caregiver facilitated more language learning activities. This makes sense in terms of the rapid development of language at this age. When more of this age group were present, all children tended to engage more often in large muscle play--climbing, jumping, riding tricycles. The younger, 1- or 2-year-old child, spent more time alone and received less caregiver attention when several preschoolers were present.

The greater the age mix of the children, the fewer language exchanges with the caregiver for the younger children. These children were more likely to play running and climbing games, perhaps following the older children. Preschoolers less often looked at books and did fewer language/information activities with the caregiver. Clearly, when the age mix was greater, children had more interactions with each other. When a school-age child was present, the 3- and 4-year-old children watched less television, and the

1- and 2-year olds engaged in more language-facilitating activities. Thus, the presence of the school-age child does not seem to have a detrimental effect on the other children in the home.

Patterns similar to those reported for age mix were seen when the average age of the children increased. In these homes, the children talked to their peers more often, engaged in more large muscle activities, and had fewer exchanges with the caregivers. However, the caregiver facilitated more language and information activities when the average age was older than 35 months.

In view of these findings, parents selecting a home would want to consider the age of the child. Infants seem to receive a considerable amount of attention from caregivers regardless of number and ages of the other children present.

The toddler of 1 and 2 years is likely to fare best in homes with fewer children, regardless of the ages. In homes with infants, or several toddlers, or several preschoolers, the toddler receives less caregiver attention. However, the homes with several toddlers seem to be the poorest choice. Toddlers require considerable physical-needs attention and prosocial direction--the more toddlers in a home, the less their needs are likely to be met. Several toddlers and infants may not be a good mix, because their needs for physical help are similarly demanding of caregiver time.

The 3- and 4-year-old child is less affected by the various age groups of children and seems to manage well, especially when several children of that age are present. Older children coming to the home after school seem to have a positive effect on the home. Thus, the parent need not avoid homes that also provide after-school care for children.

The choice of a day care home depends on what parents want for their children in terms of daily experiences and care. If parents want children to have more socializing experiences, they may want to consider a home with a greater age mix of children. If parents are interested in having their child develop language capability, they may want to consider our findings that more language and information activities occurred in homes with several 3- and 4-year olds present. Given the findings regarding the regulatory status of homes, a parent would most likely want to consider these factors when selecting a family day care home. These findings may be useful in guiding policy regarding the age mix and numbers of children to be cared for in homes.

Clearly, these findings can provide policymakers with data to assist in their deliberations regarding numbers and ages of children to be cared for in different home care situations.

3. Are differences in caregiver education related to the kinds of experiences children have in family day care homes? The issue is whether training or educational intervention could improve the quality of care children receive.

The majority of caregivers in the sample had not completed high school. However, the formal education of caregivers was not related to the type of care children received. In our analysis, we found that the caregivers with more education tended to do less helping and to be less directive (e.g., they used fewer "do it" statements). They also facilitated exploratory fine motor activities less often, such as playing in water, sand, dough, paint (activities that can be "messy"). In homes where the caregiver had more education, the 12- to 35-month-old child tended to look at books less often but helped with household tasks more often. The 36- to 59-month-old child was found to watch television less often and more often handled physical needs alone. In a study of extremes or outlying homes, the caregiver who provided the most teaching had less than a high school education and also exhibited the most positive affect. That caregiver, however, was part of a sponsored network that received some training in child care.

The National Day Care Cost-Effects Study (Ruopp et al., 1979) reported that center caregivers with training relevant to young children delivered better care with somewhat superior developmental effects for children. However, just as we did, they found no relationship between years of formal education and child care. The educational content of the NDCHS family caregivers was analyzed in Volume II by Abt Associates, Inc., in terms of its relevance to caring for children, and results similar to Ruopp's center study were found. Although formal education per se seems to have little effect on caregiver and child behavior, the results of the investigation of sponsors in networks suggest that some form of training in the delivery of day care might be useful.

4. Does the number of years caregivers have been caring for children (their own or others) make a difference in the kinds of experiences children have in family day care? The issue is whether some minimal level of experience should be required before caregivers are licensed or registered. (Some believe that a provisional training license might be granted to inexperienced caregivers during the time they gain experience and perhaps receive training from a sponsor or network.)

The average number of years caregivers have been caring for children is 7. The range is 1 month to 39 years. Nothing in the findings suggests that caregivers with less experience do a poorer job of caring for children than do caregivers with more experience. Findings from our analysis were sparse, indicating only that when the caregiver had more experience the 1- or 2 year-old child expressed more antisocial behavior toward other young children and the preschool child engaged in more exploratory fine motor activity.

To more closely examine some homes, we identified 19 caregivers who accounted for the highest frequencies of certain behaviors. We found, in these 19 cases, that the caregivers who used the most strict control, showed most negative affect, and were most directive had more than 11 years of experience. The caregivers with more experience tended to be older and more often cared for their grandchildren or other relatives. Other caregivers with less experience (6 months to 3 years) provided the most help, comfort, affection, and prosocial guidance. These caregivers were younger. The most teaching and the most facilitation of language/information and structured fine motor activities were done by three caregivers who had more than 7 but less than 11 years of experience.

Data from specially selected cases cannot be generalized to other situations because only a few homes represent each observation variable. Nevertheless, it appears from the regression analyses and from the study of outlying homes that children in the homes of younger caregivers have experiences somewhat different from those of children in homes of older caregivers.

5. Do broad cultural patterns exist that distinguish caregiver and child behaviors among major ethnic groups that use family day care? The issue is whether such patterns are really cultural differences or rather are the result of confounding ethnicity

310

with other caregiver characteristics such as education. This information could be useful in developing training and delivery systems and could help policymakers be more responsive to the major constituencies of day care.

When all independent variables were held constant (e.g., caregiver education, age, experience, and regulatory status), only three significant differences in caregiver behavior could be attributed to ethnicity. Black caregivers tended to be more directive than were the White or Hispanic caregivers. This relationship was found in one variable that included all children in the home and in another that specified the 1- and 2-year-olds. White caregivers less often interacted with school-age children than did Hispanic and Black caregivers.

The only child observation variables that were related with ethnicity indicate that 3- and 4-year-old children in the homes of White caregivers look at books more often than do children in the homes of Black or Hispanic caregivers. In homes of Black caregivers, the 3- and 4-year-old children were less likely to involve the caregiver in helping them with physical needs. Children in White and Hispanic homes required this type of assistance more often. No significant differences were found in the data on 1- and 2-year-olds.

Clearly, broad cultural patterns have not been identified in these observation data. The significant findings are so few that they could have occurred by chance. Consequently, information regarding ethnic differences in providing child care that might aid policymakers is not available from this study.

6. Do regional differences exist in caregiver and child behaviors? The issue is whether regulations should be similar in all parts of the country. For example, in geographical areas with warm climates children can play out-of-doors year-round whereas they cannot in cold climates.

When all independent variables were held constant (education, site, ethnicity), a number of differences were found in the behaviors of caregivers and children from site to site. Philadelphia caregivers tended to spend more time teaching and participating with the children and in promoting language/information and in having them assist in household work activities. They also expressed more negative affect than did caregivers at the other sites. San

Antonio caregivers tended to be more directive and controlling, and they promoted gross motor activities and prosocial behaviors more often than caregivers at the other sites.

The behavior of children differed by site in that Philadelphia children 12 to 35 months old were more often observed in sharing and helping (prosocial) behaviors. They spent less total time monitoring others' activities than did children of the same age in the other sites. San Antonio children 12 to 35 months old spent more of their total time in activities with the caregiver, whereas children 36 to 59 months old spent more total time with other young children and less time monitoring others' activities than did children of the same age group in the other sites.

Making a broad statement about the effects of site on behaviors is difficult. The findings do not portray any particular pattern that could guide regulations in different geographical locations. The climate in Philadelphia in the late autumn, when observations were conducted, most likely required that children be indoors most often, whereas the milder climates of San Antonio and Los Angeles would permit outdoor play. Moreover, a different pace for children and caregivers can be expected to exist in inner-city Philadelphia than exists in the smaller, less hurried city of San Antonio or in Los Angeles. The three sites were, in fact, different in characteristics of the study design. The Philadelphia sample did not include Hispanic homes, whereas Los Angeles and San Antonio did. San Antonio had registered homes, whereas Los Angeles and Philadelphia had licensed homes. With such basic differences, finding differences in child and caregiver behaviors is not surprising. The findings do not lend themselves to guiding policy for different geographical locations. More studies of this type are needed to see whether the findings in Philadelphia, San Antonio, and Los Angeles would be replicated in other cities with similar characteristics.

Cautions or Limitations

The generalizability of the findings from this study is limited to the extent that participation of caregivers was voluntary and self-selection effects were unavoidable. That is, caregivers who chose to allow themselves to be observed may be systematically different from those who refused. This is a problem endemic in social science research of this type. A second problem lies in the effect of the presence of observers in the day care home on the behavior of the caregivers. Caregivers may have behaved differently because someone was watching. It will be important to see to what extent the findings are replicated in other studies in different sections of the country.

Contributions of the Study

The Carew/SRI Observation System developed during the study provided comprehensive and reliable data on family day care homes. It should be a useful tool to others who plan studies of family day care.

Although many have questioned the relationship of observer bias to the validity of the data collected, few have systematically studied this source of error. The careful documentation and comparison of observers' responses in the field as well as with criterion videotapes provide substantive data regarding observer bias. We found no cultural bias in the observation records of Hispanic, Black, and White observers. This study contributes significantly to the understanding of observer effect on data.

We found caregiver behavior to be remarkably stable. This was confirmed in comparison data collected hour to hour, day to day, and week to week and in the structured and natural observations. Little has been known about the stability of behavior observed in homes. These findings can help determine how much observation time is required for an adequate sample of behavior.

Data from this study can help guide family day care policy regarding regulation of the numbers and age groups of children in day care homes. It also suggests some minimum intervention of educators in child care through sponsorship or licensing.

REFERENCES

Andersson, T. Bilingual elementary schooling: A report to Texas educators. In A. Canous, B. Gordon, & W. Stewart (Eds.), Linguistic cultural differences and American education (Vol. 7, No. 1). Florida: FL Reporter, Inc., 1979.

Baumrind, Diana. Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 1967, 75, 43-88.

Belsky, J., & Steinberg, L. D. The effects of day care: A critical review. Child Development, 1978, 49, 929-949.

Bowlby, H. Attachment and loss, Vol. I. Attachment. London: Hogarther, 1979.

Bryan, J. H., & London, P. Altruistic behavior by children. Psychological Bulletin, 1970, 73, 200-211.

Bureau of Regulatory Services, State of Michigan, Department of Social Services. Demonstration Project for the Registration of Family Day Care Homes. Lansing, Michigan, 1977.

Caldwell, B., Heider, J., & Kaplan, B. The inventory of home stimulation. Paper presented at American Psychological Association, New York, September 1966.

Carew, J. V. Social class, everyday experience and the growth of intelligence in young children. Paper presented to the International Society for the Study of Behavioral Development, July 1975.

Carew, J. Effective caregiving: The child from birth to three. Paper presented at the conference Parenting: A New Perception, New Orleans, April 1977.

Carew, J. V. Experience and the development of intelligence in young children at home and in day care. Cambridge, Massachusetts: Harvard Graduate School of Education, March 1978.

Carew, J., Chan, I., & Halfar, C. Intelligence and experience in day care. Final report to the National Institute of Mental Health, 1976a.

Carew, J., Chan, I., & Halfar, C. Observing intelligence in young children: Eight case studies. Englewood Cliffs, New Jersey: Prentice-Hall, 1976b.

Carew, J., Chan, I., & Halfar, C. Observed intellectual competence and tested intelligence: Their roots in the young child's transactions with his environment. In S. Cohen & T. J. Comiskey (Eds.), Child development: A study of growth processes (2nd Ed.). Itasca, Illinois: F. E. Peacock Publishers, Inc., 1977.

Clarke-Stewart, A. Interactions between mothers and children. Monograph of Society for Research in Child Development, 1973, 38, 6-7 (Serial #153).

Cochran, M. M. A comparison of group day and family child-rearing patterns in Sweden. Child Development, 1977, 48, 702-707.

Colbert, J. C., & Enos, M. M. Final report: Educational services for home caregivers. Chicago: Roosevelt University, College of Education, 1978.

Collins, A. H., Emlen, A. C., & Watson, E. L. The Day Care Neighbor Service: An interventive experiment. Community Mental Health Journal, 1969, 5(3).

Emlen, A. C. Family day care for children under three. Paper presented at the International Symposium on the Ecology of Care and Education of Children under Three, February 1977.

Emmerich, W. Continuity and stability in early social development, Part II, Teacher ratings. Child Development, 1966, 37, 17-27.

Everson, H., & Ambron, S. Interactive observation system for 1-3 year olds. Boystown Center, Stanford University (unpublished).

Feshbach, N. Sex differences in children's modes of aggressive responses toward outsiders. Merrill-Palmer Quarterly, 1969, 15, 249-258.

French, E. A comparison of caregivers in family and center day care. Unpublished doctoral dissertation, Stanford University, 1980.

Golden, M. Final report: New York infant day care study. Medical and Health Research Association of New York City, Inc., 1977.

Golden, M., Rosenbluth, L., Grossi, M. T., Policare, H. J., Freeman, H., Jr., & Brownlee, E. M. The New York City infant day care study. New York: Medical and Health Research Association of New York City, Inc., 1978.

Hall, A., & Weiner, S. The supply of day care services in Denver and Seattle, Menlo Park, California: Stanford Research Institute, Center for the Study of Welfare Policy, 1977.

Heathers, G. Emotional dependence and independence in nursery school play. Journal of Genetic Psychology, 1955, 87, 37-57.

Hill, C. The child care market: A review of the evidence and implications for federal policy. Paper prepared for Assistant Secretary for Planning and Evaluation, DHEW, 1977.

Hoffman, J. L. Moral development. In P. Mussen (Ed.), *Carmichael's manual of child psychology* (3rd Ed.). New York: John Wiley & Sons, Inc., 1970.

Howes, C., & Rubenstein, J. Toddler social development in two daycare settings. Paper presented at the annual meeting of the Western Psychological Association, San Francisco, California, 1978.

John, V. P., & Horner, V. *Early childhood bilingual education*. New York: Modern Language Association, 1971.

Kagan, J. Cognitive development and programs for day care. In E. H. Grotberg (Ed.), *Day care: Resources for decisions*. Washington, D.C.: Office of Economic Opportunity, June 1971, pp. 135-152.

Kagan, J., Kearsley, R., & Zelaszo, P. The effects of infant day care on psychological development. Paper presented to American Association on the Advancement of Science, Boston, 1976.

Kessen, W., Fein, G., Clarke-Stewart, A., & Starr, S. *Variations in home based infant education: Language, play, and social development*. Final report, Office of Child Development, 1975.

Layzer, J., & Goodson, B. National day care infant study--Core observation. Cambridge, Massachusetts: Abt Associates, Inc., 1977. (Unpublished)

Lippman, M. A., & Grote, B. H. *Social-emotional effects of day care*. Project report, Western Washington State College, 1974.

Litsinger, D. *The challenge of teaching Mexican-American students*. New York: American Book Co., 1973.

Lounsbury, K. R., & Lounsbury, J. W. Research on day care licensing: Implications for the registration of family day care and related research. National Conference on the Registration of Family Day Homes, Texas Department of Human Resources, Austin, Texas, 1977.

Meyer, W. J. Staffing characteristics and child outcomes. Paper prepared for the Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education and Welfare, January 1977. (Mimeographed)

Peters, D. L. *Day care homes: A Pennsylvania profile*. University Park: College of Human Development, Pennsylvania State University, 1972. (ERIC Document Reproduction Service No. ED 097 097)

Prescott, E. A comparison of three types of day care and nursery school-home care. Paper presented to Society for Research in Child Development, Philadelphia, Pennsylvania, 1973.

Proscott-SRI child observation system. Menlo Park, California: Stanford Research Institute, September 1976.

Public Services Administration. *Social services USA*. Washington, D.C.: SRS, HEW, 1976.

Reinhart, R., & Evans, J. Family day care: Early identification of children with emotional disorders. *Child Welfare*, 1977, *56*(2), 109-119.

Ricciuti, H. Effects of infant day-care experience on behavior and development: Research and implications for social policy. Paper prepared for ASPE, DHEW, October 1976.

Ristau, C., Hamilton, J. Blaney, R., & Smith, M. *Instructional manual for observation instruments of the West Virginia paraprofessional child care system*. Atlanta: Family Learning Centers, Inc., 1976.

Rodriguez, D., & Hignett, W. F. Guidelines for the selection of home base day care givers. *Child Welfare*, 1976, *55*(1), 20-26.

Rubenstein, J. L., & Howes, C. Caregiving and infant behavior in day care and in homes. *Developmental Psychology*, 1979, *15*, 1-24.

Ruopp, R., Travers, J., Glantz, F., & Coelen, C. *Children at the center: Final report of the National Day Care Study*. Cambridge: Abt Associates, Inc., 1979.

Sale, J. Family day care--Potential child development service. *American Journal of Public Health*, 1972, *62*(5).

Saunders, M. M., & Keister, M. E. Family day care: Some observations. Washington, D.C.: Day Care and Child Development Council of America, 1972. (ERIC Document Service Reproduction No. ED 072 856)

Schaefer, E. S. Dimensions of competence in classrooms. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April 1975.

Schultze, C. L., Fried, E. R., Rivlin, A. M., & Teeters, N. H. Child care. In *Setting national priorities: The 1973 budget*. Washington, D.C.: Brookings Institution, 1972.

Schwarz, J. C., Strickland, R. G., & Krolick, G. Infant day care: Behavioral effects at preschool age. *Developmental Psychology*, 1974, *10*, 502-506.

Sears, R. R., Rau, L. & Alpert, R. *Identification and child rearing*. Stanford, California: Stanford University Press, 1965.

Solley & Murphy. Development of the perceptual world. New York: Basic Books, 1960.

Stanford University. Day Care and Early Social Development Study. S. Ambron & M. Everson, principal investigators, 1980.

Thonis, E. Rationale for a bilingual approach. Paper presented by Los Angeles City Unified School District Bilingual Schools Program, Title VII, 1973.

Tucker, S. A review of research on home day care. Washington University mimeograph, no date.

U.S. Congress, Senate Committee on Finance. *Child care: Data and materials* (Committee print). Washington, D.C.: U.S. Government Printing Office, December 31, 1977.

Vroegh, K. *Infant day care: Some research findings*. Chicago: Institute for Juvenile Research, 1976. (ERIC Document Reproduction Service No. ED 135 460)

Wattenberg, E. Characteristics of family day care providers: Implications for training. *Child Welfare*, 1977, *56*(4), 211-229.

Westinghouse Learning Corporation and Westat Research, Inc. *Day care survey--1970: Summary report and basic analysis*. Washington, D.C.: Office of Economic Opportunity, 1971. (Mimeograph)

Whiting, J.W.M., & Child, I. *Child training and personality*. New Haven, Connecticut: Yale University Press, 1953.

Wilcox, M., Alford, S., Carew, J., Gillis, G., Porter, A., & Stallings, J. *National day care home study Phase I pilot report*. Menlo Park, California: SRI International, June 1977.

Appendix A

STUDY ORGANIZATION CHART AND LIST OF CONSULTANTS

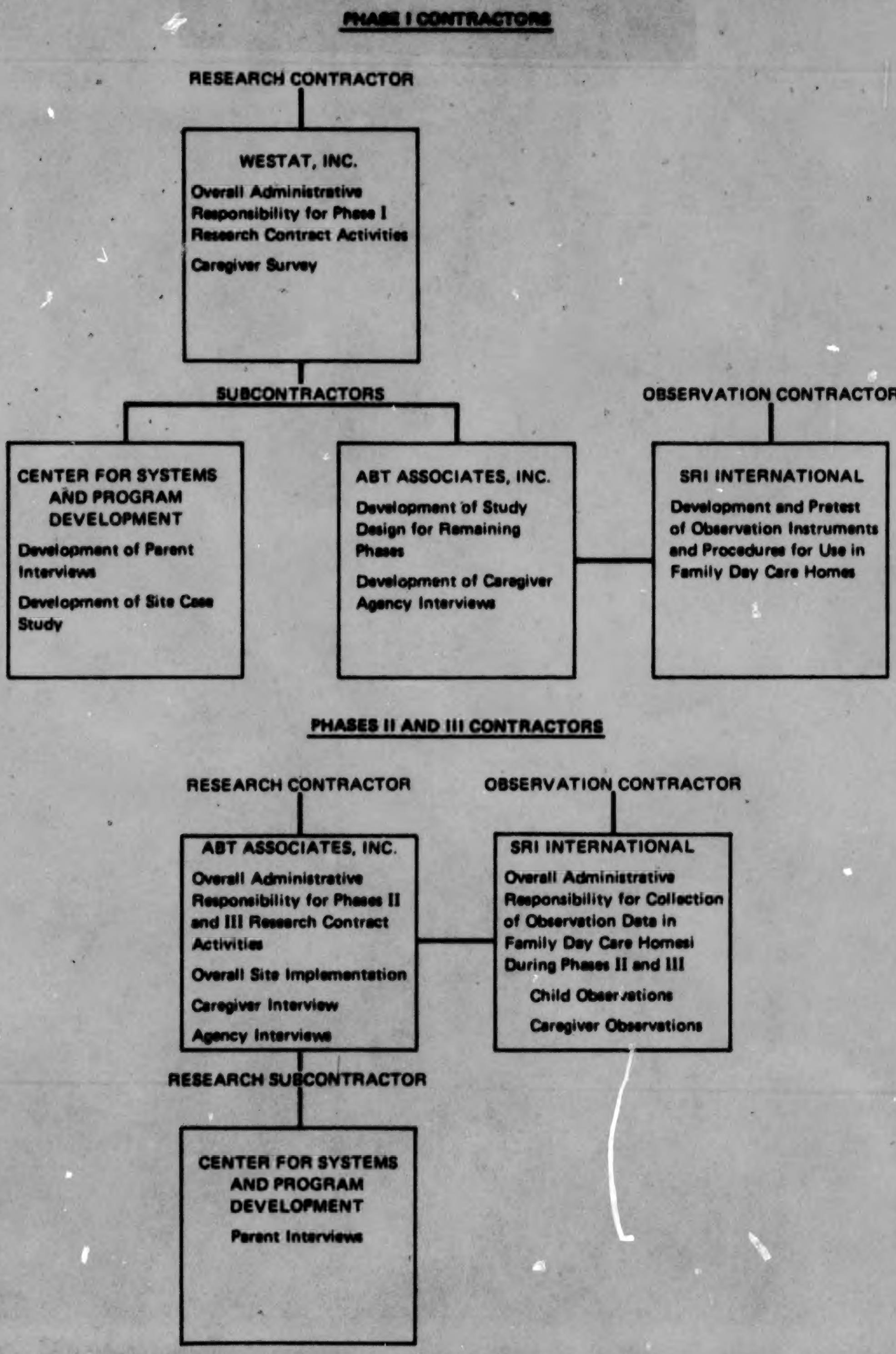

PHASE I CONTRACTORS
RESEARCH CONTRACTOR
WESTAT, INC.
Overall Administrative Responsibility for Phase I Research Contract Activities
Caregiver Survey
SUBCONTRACTORS
OBSERVATION CONTRACTOR
CENTER FOR SYSTEMS AND PROGRAM DEVELOPMENT
Development of Parent Interviews
Development of Site Case Study
ABT ASSOCIATES, INC.
Development of Study Design for Remaining Phases
Development of Caregiver Agency Interviews
SRI INTERNATIONAL
Development and Pretest of Observation Instruments and Procedures for Use in Family Day Care Homes
PHASES II AND III CONTRACTORS
RESEARCH CONTRACTOR
OBSERVATION CONTRACTOR
ABT ASSOCIATES, INC.
Overall Administrative Responsibility for Phases II and III Research Contract Activities
Overall Site Implementation
Caregiver Interview
Agency Interviews
SRI INTERNATIONAL
Overall Administrative Responsibility for Collection of Observation Data in Family Day Care Homes During Phases II and III
Child Observations
Caregiver Observations
RESEARCH SUBCONTRACTOR
CENTER FOR SYSTEMS AND PROGRAM DEVELOPMENT
Parent Interviews

FIGURE A-1 STUDY ORGANIZATION

NATIONAL DAY CARE HOME STUDY CONSULTANTS

*Dr. Walter R. Allen
University of North Carolina
at Chapel Hill

Dr. Urie Bronfenbrenner
Cornell University

*Dr. Jean Carew
Stanford University

Mrs. Patricia Cox
Cincinnati, Ohio

Dr. Arthur Emlen
Portland State University

Dr. Robert Fein
McLean Hospital

Dr. Ned A. Flanders
Oakland, California

*Ms. Angela Garcia
San Jose Bilingual Consortium

*Ms. Marjorie D. Grosett
Day Care Council of New York, Inc.

*Mrs. Helena Hicks
Baltimore County Social Welfare

*Dr. Asa Hilliard
San Francisco State University

Ms. Mary Jackson
Agency for Child Development

*Dr. Luis Laosa
Educational Testing Service

Dr. Richard Light
Harvard University

Dr. Eleanor Maccoby
Stanford University

Dr. Donald Medley
University of Virginia

Ms. Gwen Morgan
Wheelock College

*Dr. Ura Jean Oyemade
Howard University

Dr. Andrew Porter
Michigan State University

Dr. Elizabeth Prescott
Pacific Oaks College

*Mr. David Ramirez
San Jose County Office of
Education

*Dr. Pearl Rosser
Howard University

Dr. Mary P. Rowe
Massachusetts Institute of
Technology

Ms. June Solnit Sale
Pacific Oaks College

*Ingrid Saunders-Jones
Child Care Coordinating Council

---

*Minority Task Force.

Appendix B

PHASE III INSTRUMENTS

Carew/SRI Adult Behavior Codes Instrument - Description and Definitions

Carew/SRI Child Codes Instrument - Description and Definitions

Checklists and Observation Summary

Structured Situations

Daily Log

CAREW/SRI OBSERVATION SYSTEM
ADULT BEHAVIOR CODES INSTRUMENT -
DESCRIPTION AND DEFINITIONS

CAREW – SRI OBSERVATION SYSTEM
Adult Behavior Codes

5044

DATE		
MO	DA	YR
0 0	0 0	0 0
1 1	1 1	1 1
2 2	2 2	2 2
3 3	3 3	3 3
4 4	4 4	4 4
5 5	5 5	5 5
6 6	6 6	6 6
7 7	7 7	7 7
8 8	8 8	8 8
9 9	9 9	9 9

OBSERVER NAME ______________________ — B W H O ———— NUMBER

CO-OBSERVER NAME ______________________ — B W H O -NO.

○ Natural ○ Reliability

○ Play-Doh ○ Adult
○ Child

○ A.M. ○ P.M.

NUMBER: 0 0 0 / 1 1 1 / 2 2 2 / 3 3 3 / 4 4 4 / 5 5 5 / 6 6 6 / 7 7 7 / 8 8 8 / 9 9 9

-NO.: 0 0 0 / 1 1 1 / 2 2 2 / 3 3 3 / 4 4 4 / 5 5 5 / 6 6 6 / 7 7 7 / 8 8 8 / 9 9 9

BOOKLET NUMBER: 0 0 0 0 0 / 1 1 1 1 1 / 2 2 2 2 2 / 3 3 3 3 3 / 4 4 4 4 4 / 5 5 5 5 5 / 6 6 6 6 6 / 7 7 7 7 7 / 8 8 8 8 8 / 9 9 9 9 9

CAREGIVER

1. 0 0 0 0 / 1 1 1 1 / 2 2 2 2 / 3 3 3 3 / 4 4 4 4 / 5 5 5 5 / 6 6 6 6 / 7 7 7 7 / 8 8 8 8 / 9 9 9 9

2. 0 0 0 0 / 1 1 1 1 / 2 2 2 2 / 3 3 3 3 / 4 4 4 4 / 5 5 5 5 / 6 6 6 6 / 7 7 7 7 / 8 8 8 8 / 9 9 9 9

3. 0 0 0 0 / 1 1 1 1 / 2 2 2 2 / 3 3 3 3 / 4 4 4 4 / 5 5 5 5 / 6 6 6 6 / 7 7 7 7 / 8 8 8 8 / 9 9 9 9

1. NAME ______________________ ETHNICITY B W H O

2. NAME ______________________ B W H O

3. NAME ______________________ B W H O

					AGE (Mos.)	CG'S CH	CG'S REL
01 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9	○	○
02 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9	○	○
03 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9		
04 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9	○	○
05 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9		
06 NAME: ______	FOCUS 1 2	PM	SEX M F	ETHNICITY B W H O	0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9		

5712CA1/2249-Intran-54321

Carew/SRI Observation System
ADULT BEHAVIOR CODES INSTRUMENT
Description and Definitions

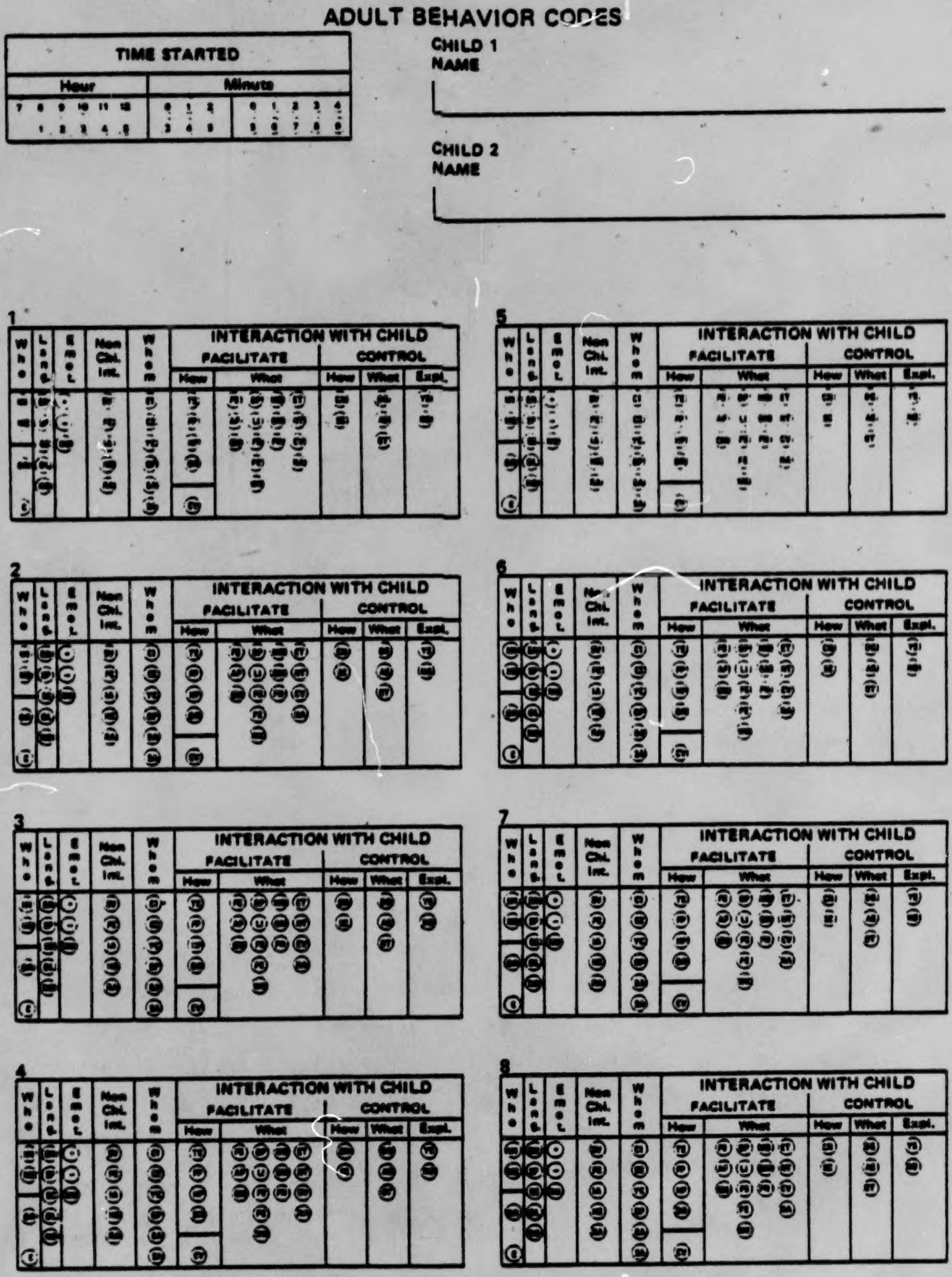
CODING PROCEDURES AND DEFINITIONS

Coding Procedures

The focus person's behavior is observed for 3 seconds and recorded in the next 17 seconds; thus, a complete observe-record sequence occurs every 20 seconds. The observer records adult behaviors on the ABC for 5 minutes at a time. In each hour of observation, the observer completes one observation booklet, consisting of eight 5-minute observations (FMOs) on the ABC instrument. Each FMO consists of 15 coding frames numbered consecutively and set up in such a manner that the observer codes from the top to the bottom on the page in the left-hand column, with the same procedure then followed in the right-hand column. One frame is recorded every 20 seconds for the 5-minute period. Figure B-1 illustrates the first page of the ABC.

The Adult Behavior Code Frame

Each Adult Behavior Code (ABC) coding frame has ten dimensions, eight of which describe the caregiver's behavior toward children during 3-second observation intervals. The Who column identifies which caregiver is being observed (i.e., the primary caregiver or an assistant caregiver). The Language column designates whether the caregiver used English words, Spanish words, both, a language other than English or Spanish, or no words during the interaction. The Non-Child Interactive column includes codes for caregiver behaviors that do not facilitate or control children's activities; rather, they indicate limited or no interactions between caregiver and children. The Whom column identifies the child with whom the caregiver is interacting. Facilitate-How describes



ADULT BEHAVIOR CODES

TIME STARTED		
Hour	Minute	
7 8 9 10 11 12 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5 6 7 8 9

CHILD 1
NAME

CHILD 2
NAME

1

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

2

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

3

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

4

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

5

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

6

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

7

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

8

Who	Lang.	Emot.	Non Chl. Int.	Whom	INTERACTION WITH CHILD				
					FACILITATE		CONTROL		
					How	What	How	What	Expl.

Figure B-1: SAMPLE OF FIRST PAGE OF THE ADULT BEHAVIOR CODES (ABC) what the caregiver is doing during the 3-second interaction. Facilitate-What describes the activity context in which the caregiver relates to a child (usually the context is the activity in which the child is involved during the interaction with the caregiver). The Control codes describe the caregiver's method of controlling the child's behavior, if she has tried to do so. The Emotion column describes the feeling conveyed by the caregiver's behavior as positive, negative, or neutral.

The section that follows defines the codes for the ABC in the order in which they appear on the coding frame.

Behavioral Definitions: Adult Behavior Codes (ABC)

The following codes are used to describe the caregiver's behavior and interactions with children and/or adults during the three-second observation intervals.

Who Column

M-1 = Primary Caregiver: The caregiver in the day care home who has the main responsibility for the children. M-1 will be the focus of observations unless caregiver responsibilities are assumed by any one of the persons listed in M-2 below in this column.

M-2 - Secondary Caregiver: Any other person who serves as a caregiver while M-1 is otherwise engaged. M-2 may apply to an assistant caregiver, another adult, or an older child who has been given the temporary responsibility of the children.

OR = Out of Room/Range: The caregiver (or M-2) leaves the room with children unattended, that is, she has gone some place where it would be inconvenient or obtrusive for the observer to follow. (When this code is used, no other codes are recorded in the frame.)

Language Column

The language column records the occurrence of caregiver's language during the three-second observation interval. Language does not include sounds that are not real words.

EN = English: Caregiver uses only English words during the observation interval.

SP = Spanish: Caregiver uses only Spanish words during the observation interval.

ES = English and Spanish: Caregiver uses both English and Spanish words during the observation interval.

OL = Other Language: Caregiver uses a language other than English or Spanish during the observation interval.

NO = No Language: Caregiver uses no words during the observation interval.

Emotion Column

The emotion column records the caregiver's emotion as she interacts with the children or adults.

+ = Positive: Caregiver expresses positive affect, such as a smile, laughter, glee, enthusiasm, or excitement.

- = Negative: Caregiver is angry or sarcastic. She criticizes, is demeaning (labels unkindly), or uses threatening statements. (Note: Control does not necessarily imply negative affect.)

NU = Neutral: Caregiver expresses neither positive nor negative emotion.

Non-Child-Interactive Column

The Non-Child Interactive column identifies those caregiving behaviors that involve very little direct involvement (supervise, preparation for children) or no direct involvement with children (interaction with adults, household tasks, and caregiver recreational activities).

SV = Supervise: Caregiver monitors, watches children's activities without direct physical involvement or verbal interaction.

Examples:

- Caregiver watches as children eat their lunch.
- Caregiver sits on the edge of the sandbox and watches the children play.
- Caregiver sits with the children during their activity; during the signaled interval, she is only watching them.

PC = Preparations for Children: Caregiver prepares materials in advance of the children's activities or makes other preparations that directly benefit the children without direct involvement or verbal interaction.

Examples:

- Caregiver mixes paint in jars for children's next activity.
- Caregiver is pouring juice at the counter for the children's snack.
- Caregiver is taking toys out of the cupboard for the children's future activity.
- Caregiver gets children's jackets so they can go out to play.

IA = Interaction with Adult: Caregiver converses with adults or talks on the telephone. All caregiver interactions with adults are coded IA.

Examples:

- Caregiver asks Mrs. Fulson where she gets her hair done.

- Caregiver chats on the telephone.
- Caregiver asks the secondary caregiver to prepare lunch for the children.

HS = Household Tasks: Caregiver is involved in housekeeping tasks that bear no direct relation to the children. These include: putting away materials, picking up, washing dishes, vacuuming, ironing, feeding animals, laundering , watering plants, sewing, mopping the floor, and the like. In addition, if the caregiver is in transit from one place to another during the entire three-second interval, she is coded as engaged in housekeeping tasks. HS includes all interactions with animals.

Examples:

- Caregiver hangs up children's jackets.
- Caregiver wipes up milk that has been spilled.
- Caregiver clears the table after lunch.
- Caregiver sews while the children play.
- Caregiver washes the baby's bottle.
- Caregiver is running to answer the telephone.

RA = Recreational Activity: Caregiver engages in relaxing or recreational activity that does not involve children. Personal physical needs are coded RA, such as putting on make-up, combing hair, or eating alone.

Examples:

- Caregiver watches TV alone.
- Caregiver reads the newspaper.
- Caregiver sunbathes on the patio.
- Caregiver drinks a cup of coffee and eats a donut.

Whom Column

The Whom column identifies the child or children with whom the caregiver is interacting during the three-second interval.

C1 = Child 1: Previously identified focus child of 12 through 35 months with whom the caregiver is interacting individually.

C2 = Child 2: Previously identified focus child of 36 through 59 months with whom the caregiver is interacting individually.

YC = Young Child: Any child (other than the two focus children) of 12 to 59 months with whom the caregiver is interacting individually.

GP = Group: Two or more children, or child(ren) and adult(s) with whom the caregiver is interacting simultaneously.

BA = Baby: Any child under 12 months of age with whom the caregiver is interacting individually.

SA = School Age Child: Any child of five through 12 years of age with whom the caregiver is interacting individually.

Interaction with Child Section

The observer records the caregiver's behaviors in only one of these two sections, Facilitate or Control.

Facilitate Section

Facilitating codes include caregiver behaviors that promote the child's learning or serve to further the child's activity.

The Facilitate Section is divided into two columns (both of which are recorded):

- The How column describes the caregiver's technique.
- The What column describes the child's activity or the activity the caregiver wants to promote.

How Column

Five caregiver facilitating techniques are listed in the How column in order of priority. The first technique listed is of highest importance and so on in descending order. If the caregiver's attention is equally focused on two different children's activities during the three-second interval, the observer records the one that is placed higher in the list of codes under "How." For example, if a caregiver is showing one child how to hold a paintbrush (Teaches--TE) while she directs another child to play with blocks (Directs--DR), the observer records TE because it appears above DR in the How column.

TE = Teach: Instruction is accomplished through labeling, explaining, demonstrating, questioning, recapping, providing task-oriented feedback (both positive and corrective), prompting or encouraging the child to respond, asking for clarification of a child's statement, and providing instructions or directions for performing a specific activity. Reading to a child is also recorded TE.

Examples:

- "This is a grape--grape; and this is cheese--cheese." (Labels)

- "Right! That's the way to do it." (Provides feedback)
- "Marvelous! Wonderful! Great job! Good girl! Very good! Thank you!" (Provides positive feedback)
- Child says, "This is blue." Caregiver replies, "No, that's green--this is blue." (Provides corrective feedback)
- Caregiver asks child about picture they are looking at: "What do you think happened there?" (Questions)
- Caregiver shows child how to use cookie cutter. (Demonstrates)
- "You know how it goes, Aaron. You tell us." (Prompts child to respond)
- "Now remember what I told you--Anne goes first, then John, then Timmy." (Recapping)
- "Will you tell me again--I don't think I understood you." (Asks for clarification)
- Caregiver reads to the children. (Reads)

PP = Play/Participate: Caregiver joins in child's activity; enters into games; participates in dramatic play; takes part in activity like a playmate. Play/Participate is also used when the caregiver is attentive to a child as he explains or demonstrates to her or as he asks her for information. (Note: if the caregiver is attentive to a child in an exchange of social chit-chat, the observer records CV, not PP.)

Examples:

- Caregiver plays ball with child or children.
- Caregiver gets a ride on the back of child's tricycle.
- Caregiver listens and watches as child explains and shows her how to pick up and hold a guinea pig.
- Caregiver is attentive as child asks her why bees sting.

HP = Help: Caregiver gives physical assistance to a child or gives out materials to further the activity; she is giving the child(ren) immediate assistance.

Examples:

- Caregiver holds child's hands as he jumps to the ground.
- Caregiver serves lunch to children.
- Caregiver passes out crayons to each of the children.
- Caregiver supports child while he tries to get on a tricycle.
- Caregiver pushes child on a swing; pulls child in a wagon.

DR = Directs: Caregiver suggests or directs child(ren) to a difficult activity or event. She informs them of scheduled events. She may offer a child a choice of events, or she may specify a particular activity for the child. In any case, DR signals an event change, either at that moment or in the future. (Note: caregiver is not acting out of disapproval of the child's present activity.)

Examples:

- "Do you want to play ball now?"
- "Later we're going to read a book."
- "Get me the scissors from the kitchen counter."
- "It's time for lunch."
- "Come on, we're going for a walk."
- "Will you pull the wagon for John, Shannon?"
- "Let's make a kite."
- "Let's clean up now."

CV = Conversation: Caregiver comments to or engages in noninstructional, routine conversation, social chit-chat or comments with children. Facilitate-How CV is always coded with Facilitate-What CV.

Examples:

- Caregiver asks child, who is putting a puzzle together, what she did over the weekend and listens as child tells her.
- "What do you want to have for dinner?" asks the caregiver.
- Caregiver looks at her watch and says to Sally, "Billy is late; wonder if he is coming today."
- Caregiver announces, "I guess I'll dust while you're playing."
- "What's that you're doing?"
- "You're having a good time, aren't you?"

What Column

The What column of the Facilitate section describes either an activity the caregiver wants to promote or the activity in which both caregiver and child are engaged. The activity is coded with the How section technique (for example, Teach/Dramatic Play).

The codes are listed in order of priority. For example, if the caregiver's attention is equally focused on affection and prosocial behaviors during the three-second interval, prosocial takes precedence.

PS = Prosocial: Clear expressions of kindness; consideration and concern for another's feelings or expressions of one's own feelings; sharing, helping another; good manners. (Note: this is a child's activity which the caregiver promotes; caregivers who demonstrate these behaviors will usually be coded elsewhere-- HP-CM, PP-AF, and so on.)

Examples:

- "Since there is only one tricycle, you'll have to take turns."
- "It was very nice of you to share your cookie with Sean."
- "Sean, thank Kenny for the cookie."
- "What makes you feel angry?"
- Caregiver listens to a child during a group discussion about feelings.

AF = Affection/Social Games: Verbal and nonverbal displays of affection--kissing, hugging, "I love you," personal compliments. Social games include tickling, peek-a-boo, friendly teasing, joking, and the like.

Examples:

- "Mary, give Wally a kiss."
- "My, you're a pretty girl."
- Caregiver and child enjoy a game of who can make the funniest face.

CM = Comfort: Caregiver gives verbal or nonverbal comfort; she attends to or shows concern for a distressed or hurt child. When caregiver offers comfort, the CM code is used in conjunction with HP in the How column.

Examples:

- Child shows caregiver his hurt finger; caregiver puts her arm around child and examines cut.
- Caregiver picks up and hugs child who is crying.

DP = Dramatic Play: Role play, representational play. Dramatic Play may occur with dolls and cars, but there must be clear evidence that the materials are symbolic of "real" objects. Dramatic Play is often stimulated by the use of props, but the children or caregiver must be simulating a real-life event and not just playing with toys.

Examples:

- Caregiver takes the role of the doctor for child's "sick baby," or, at warning from child, steps carefully over imaginary cat who is supposed to be sleeping on the floor.
- Caregiver and child engage in pretend telephone conversation on toy telephone.
- Caregiver brings a box of dress-up clothes for the children who are playing house.

LI = Language and Information: Activities that center around labeling reading, counting, verbal skills; activities that promote learning of nonroutine information, such as explaining how birds fly, what rabbits eat, that caterpillars turn into butterflies, and the like. LI also includes group discussions of nonroutine information.

Examples:

- Caregiver corrects child's pronunciation of "garage."
- Caregiver says, "Wonderful! You certainly know a lot about bears," as child finishes a description of their hibernation.
- Caregiver listens carefully as child recites for her the numbers from 1 to 10.
- "Say horse--horse."
- "This is an apple. What color is this apple?"

FS = Fine Motor, Structured: Small muscle activities likely to foster the development of eye-hand-spatial coordination; activities that require precision, sequencing, a systematic approach to achieve the mastery required for success (such as fitting, stacking, building, drawing, tying, cutting, sorting, measuring, matching or ordering shapes and sizes). These activities are usually goal-oriented; there is a right and wrong way to perform them. They often involve specially designed toys, tools, and mechanisms with moving parts. Activities in which children use paint brushes, cookie cutters, scissors and pencils are coded FS.

Examples:

- Caregiver is showing child how to button his coat, dial a phone, write his name, use a screwdriver, thread a needle, tie a knot, wrap a package, operate a zipper, how a key is used to lock a door, hold and paint with a paintbrush.
- Caregiver suggests that child play checkers (or leggos, jacks, pick-up sticks).
- Caregiver joins child in working a puzzle.
- Caregiver asks child to sort the forks, spoons, and knives.
- Caregiver shows child how to use nesting cups.
- Caregiver moves the beads closer to a child who is stringing them.
- Caregiver tells a child to pull the tabs on a pop-up book.

FE = Fine Motor, Exploratory/Sensory: Small muscle activities that are exploratory and less precise and manipulative than FS. These activities tend to involve a grosser level of eye-hand-spatial coordination, are more routine, and/or less goal-oriented than fine motor structured activities. Code includes sensory information--taking in sounds and the feel of things, etc.

Examples:

- Caregiver joins child in water or sand play, rubbing or feeling different textures, squeezing balls, playing with toy cars.
- Caregiver points out differences in the smell of flowers; the taste of salt and sugar; the sound of banging on a glass versus a metal container.
- Caregiver provides child with a pan and wooden spoon to bang.
- Caregiver finger paints with the children.

WK = Work: Children involved in household errands for the caregiver or in other household tasks, chores, such as washing up, setting the table, cleaning up, picking up, cooking, sweeping, raking. (Note: these activities are real work with no quality of pretend.)

Examples:

- Caregiver shows child how to wipe off the top of the table with a sponge.
- Caregiver and children are all participating in making a cake for lunch.
- Caregiver asks child to get the milk from the kitchen.
- Caregiver announces to group, "Clean-up time."

MD = Music/Dance: Playing musical instruments, singing, dancing, and listening to music. If no other activity is occurring, code humming or whistling as MD.

Examples:

- Caregiver shows children how to play a xylophone.
- Caregiver and children are singing a song.
- Caregiver passes out flutes, drums, and triangles to children.
- Caregiver and child are dancing together.
- Caregiver changes a record for children who are dancing.
- Caregiver and children lie on the floor listening to music.

GM = Gross Motor: Play/activity that involves the use of the large muscles of the arms and legs.

Examples:

- Caregiver helps a child climb to the top of the playground slide.

- Caregiver shows child how to throw a ball.
- Caregiver and child run a race together.
- Caregiver pulls a child in a wagon.
- Caregiver calls, "Wonderful!" to a child who has succeeded in jumping over a puddle.

PN = Physical Needs: Eating, dressing, washing, diapering; self-care tasks such as feeding one's self, dressing one's self.

Examples:

- Caregiver tells child to put on his coat because they'll be going outside soon.
- Caregiver wipes child's nose.
- Caregiver and children are eating lunch together.
- Caregiver calls, "It's time for lunch."

ET = Educational TV: Children's educational TV programs, including documentaries, children's news, travelogs. Code only when caregiver is watching with the children; if she is watching alone, code RA.

Examples:

- Caregiver and children are watching "Sesame Street" on TV.
- Caregiver asks children if they'd like to watch "The Electric Company."

NT = Noneducational TV: Other TV programs, including adult programs, such as adult talk shows, newscasts, commercials. Code only when caregiver is watching with the children; if caregiver is watching alone, code RA.

Examples:

- Caregiver and children are watching a soap opera.
- Caregiver tells child to turn on the TV and watch cartoons while she fixes lunch.

CV = Conversation: Noninstructional, routine conversation, social chit-chat or comments. Facilitate-How CV is always coded with Facilitate-What CV.

Examples:

- Caregiver asks child who is putting puzzle together, what she did over the weekend and listens as child tells her.
- Caregiver announces, "I guess I'll dust while you are playing."

NA = None Applies: None of the above activities are appropriate to code; no activity listed is occurring.

Examples:

- Caregiver tells child to "Go do something."
- "Go play with Bill."
- Caregiver carries child across the yard.

Control Section

The codes in this section describe the caregiver's control technique. She has judged the child's behavior as dangerous, antisocial, or as counterproductive to the situation. The outcome of the caregiver's control technique is to change or redirect the child's behavior of which she disapproves.

All three columns (How, What, Explain) of the Control Section are coded.

How Column

This column records whether the caregiver simply "controls" the child or whether she uses harsh control methods.

CN = Control: Caregiver neutrally or gently controls a child in such a way that her behavior can be clearly translated into "don't." She may simply tell him not to do something or she may physically restrain him. Her control behavior is not harsh or punishing in any case. CN is coded for behavioral controls, not task-related corrective feedback, (e.g., caregiver says "no-no that's wrong" to a child who is putting a puzzle together incorrectly: TE-FS).

Examples:

- "Don't hit her." "Stop it!" "No, no." "I told you not to do that!"
- Caregiver holds child's hand so he can't pull another's hair.
- "You can't go outside now," (as child is on her way out the door).
- "Shhh. Be quiet!"
- "Wait, wait!"

SC = Strict Control: Caregiver yells at, forcibly restrains, or expresses hostility or aggression to the child; she may isolate him, withhold privileges, threaten to punish him, hit or spank him, criticize or reject him.

Examples:

- "If you do that once more, you're going to get it." (Threatens)
- Caregiver is angry, grabs child's arm, drags him to the bedroom, and slams the door. (Isolates, exhibits anger)
- "All right, that's it! No dessert for you today!" (Withholds privileges)
- "Go away! I don't want you pestering me anymore!" (Rejects)

What Column

The What column of the Control Section describes the issue that led the caregiver to control or harshly control the child.

DG = Danger: Caregiver curtails or tries to curtail the child's actions for reasons of safety.

Examples:

- "Don't touch the burner!"
- "Get away from that plug!"
- "No! Don't put that knife in your mouth!"
- Caregiver yanks child off swing and yells, "I told you not to play on that swing--it's broken."

AS = Antisocial: Caregiver restricts children's fighting, arguing, nasty teasing, bullying, tattling, and the like.

Examples:

- "Stop that squabbling!"
- Caregiver separates two children who are hitting each other.
- "If you do any more tattling, I'm going to send you inside."

OT = Other Activity: Caregiver restricts child's activity for reasons other than those stated above, (i.e., everything but DG and AS).

Examples:

- "You're getting too messy--clean that mess up."
- "Shhh! Be quiet!"
- "Don't give any more cheese to the dog."
- "No! No! You can't go outside until you put your jacket on."
- "No, don't turn on the TV."

Explain Column

The Explain column of the Control Section records whether the caregiver has given an explanation or stated a reason for restricting the child's actions.

Yes: Caregiver gives practical explanation or states reason for controlling child.

Examples:

- "Don't touch the stove--it's hot and you'll burn yourself."
- "Don't make so much noise--you'll wake the baby."
- "Come back, Sharon. You can't play outside today because it's raining."
- "Don't put your toys there--remember the rule."

No: Caregiver gives no explanation for controlling child's action or enforces arbitary powers.

Examples:

- "Stop banging on the table."
- "No, you can't go with him."
- "Don't put your finger in that socket!"
- "Don't do it because I said so."

Carew/SRI Observation System
CHILD CODES INSTRUMENT
Description and Definitions

CAREW – SRI OBSERVATION SYSTEM
Child Codes

1057

DATE					
MO		DA		YR	
⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①
②	②	②	②	②	②
③	③	③	③	③	③
④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨

OBSERVER NAME ________________ — Ⓑ Ⓦ Ⓗ Ⓞ ———— NUMBER

CO-OBSERVER NAME ________________ — Ⓑ Ⓦ Ⓗ Ⓞ -NO.

CO-OBSERVER NO.			OBSERVER NUMBER			BOOKLET NUMBER				
⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

○ Natural ○ Reliability

○ Adult
○ Child

○ A.M. ○ P.M.

CAREGIVER

1.				2.				3.			
⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

1. NAME ________________ ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ

2. NAME ________________ Ⓑ Ⓦ Ⓗ Ⓞ

3. NAME ________________ Ⓑ Ⓦ Ⓗ Ⓞ

AGE (Mos.) — CG'S CH — CG'S REL

01 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ — ○ ○

02 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ — ○ ○

03 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ — ○ ○

04 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ — ○ ○

05 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨

06 NAME: ________________
FOCUS ① ② — FM — SEX Ⓜ Ⓕ — ETHNICITY Ⓑ Ⓦ Ⓗ Ⓞ — AGE ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨ / ⓪①②③④⑤⑥⑦⑧⑨

5712CC1/2251-Intran-54321

Carew/SRI Observation System
CHILD CODES INSTRUMENT
Description and Definitions

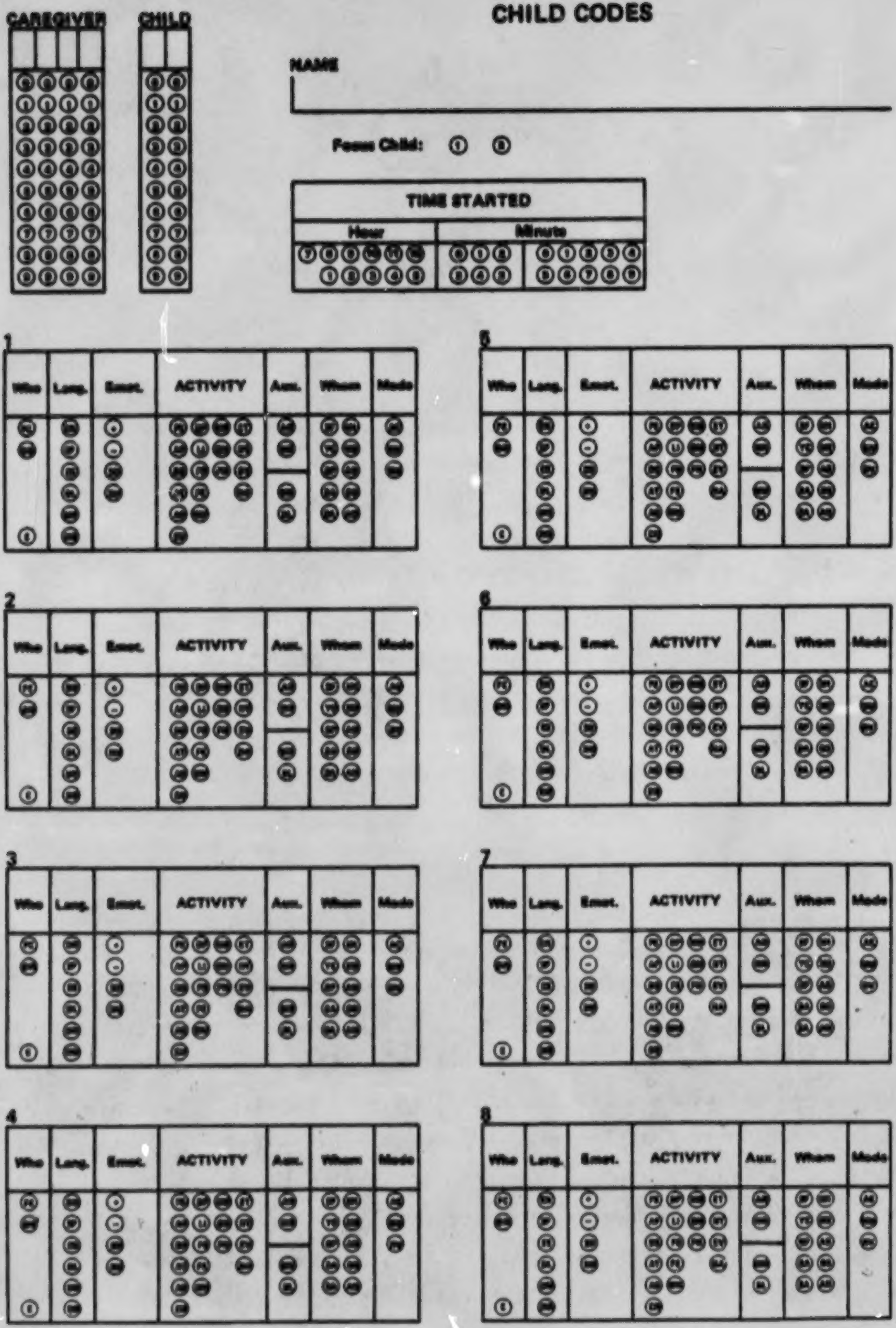
CODING PROCEDURES AND DEFINITIONS

Coding Procedures

The focus person's behavior is observed for 3 seconds and recorded in the next 17 seconds; thus, a complete observe-record sequence occurs every 20 seconds. The observer records child behaviors on the CC for 5 minutes at a time. In each hour of observation, the observer completes one observation booklet, consisting of eight 5-minute observations (FMOs) on the CC instrument. Each FMO consists of 15 coding frames numbered consecutively and set up in such a manner that the observer codes from the top to the bottom of the page in the left-hand column, with the same procedure then followed in the right-hand column. One frame is recorded every 20 seconds for the 5-minute period. Figure B-2 illustrates the first page of the CC.

The Child Code Frame

The Child Code (CC) frame has seven dimensions, five of which describe the focus child's involvement or lack of involvement in an activity during the 3-second observation interval. The Who column indicates whether the focus child is within the observer's visual range. The Language column records whether the child has used English, Spanish, both, a language other than English or Spanish, unintelligible words, or no words at all during the observation interval. The Emotion column describes the affect displayed by the focus child. The Activity column describes the activity in which the child is engaged. The Auxiliary column records supplementary information about the child;



CAREGIVER

⓪⓪⓪⓪
①①①①
②②②②
③③③③
④④④④
⑤⑤⑤⑤
⑥⑥⑥⑥
⑦⑦⑦⑦
⑧⑧⑧⑧
⑨⑨⑨⑨

CHILD

⓪⓪
①①
②②
③③
④④
⑤⑤
⑥⑥
⑦⑦
⑧⑧
⑨⑨

CHILD CODES

NAME

Focus Child: ① ②

TIME STARTED		
Hour	Minute	
⑦⑧⑨⑩⑪⑫ ①②③④⑤	⓪①② ③④⑤	⓪①②③④ ⑤⑥⑦⑧⑨

1

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

2

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

3

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

4

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

5

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

6

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

7

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

8

Who	Lang.	Emot.	ACTIVITY	Aux.	Whom	Mode

Figure B-2: SAMPLE OF FIRST PAGE OF CHILD CODES (CC) that is, whether the child's statement is related or not related to his activity, that he is watching others' activities, or that he is not involved, but rather wandering about aimlessly. The Whom column identifies the person with whom the child is interacting. Mode describes the child's manner of participation in the activity, that is, whether he initiates, is mutually involved with another, or receives the actions recorded in the frame.

The section that follows defines the codes for the CC in the order in which they appear on the coding frame.

Behavioral Definitions: Child Codes (CC)

The following codes are used to describe the activities and interactions of individual children during the three-second observation intervals.

Who Column

FC = Focus Child: The child who is the focus of the observation.

OR = Out of Room/Range: Focus child has left the room, and it would be obtrusive for the observer to follow. (When this code is used, no other codes are recorded in the frame.)

Language Column

The language column records the occurrence of the focus child's language during the three-second observation interval.

EN = English: Focus child uses only English during the observation interval.

SP = Spanish: Focus child uses only Spanish during the observation interval.

ES = English/Spanish: Focus child uses both English and Spanish words during the observation interval.

OL = Other Language: Focus child uses a language other than English or Spanish during the observation interval.

UN = Unintelligible: Focus child babbles or makes sounds that are meaningless to the observer.

NO = No Language: Focus child uses no words during the observation interval.

Emotion Column

The Emotion column records the focus child's emotion as he interacts with materials, self, children, adults, or animals.

+ = Positive: Focus child expresses positive affect such as a smile, laughter, glee, enthusiasm, or excitement.

Examples:

- Focus child laughs as he watches "Zoom."

- Focus child giggles with a playmate.
- Focus child smiles as she holds a puppy.

- = Negative: Focus child is hostile, angry, harsh with others; focus child criticizes, fights, yells, uses foul language, tattles, screams; focus child is sulky, cranky, antagonistic, disagreeable, whining or hysterical. Crying is also coded here if it is accompanied by hostility or aggressive behavior.

Examples:

- Focus child pulls another's hair.
- Focus child yells nasty threats at another, as tears stream down his face.

SD = Sad: Focus child exhibits signs of distress, is woebegone, on the verge of tears (eyes are filling, chin is trembling) or crying. When the focus child is the victim of another's aggression or intrusion and cries, code SD.

Examples:

- Focus child cries when she falls off the swing.
- Focus child is on the verge of tears after being called names.

NU = Neutral: Focus child expresses neither positive, negative nor sad emotion.

Examples:

- Focus child calmly puts puzzle together.
- Focus child listens quietly to story.

Activity Column

The codes in the Activity column describe the activities/behaviors in which the focus child is engaged during the three-second observation intervals. Within his activity, the focus child may be actively involved (he is doing, speaking) or he may be the recipient of another's actions (he is being done to, spoken to).

PS = Prosocial: Clear expressions of kindness; consideration and concern for another's feelings or expression of the child's own emotions; sharing; helping another; good manners. Verbal or nonverbal comfort-giving behaviors displayed by or to the focus child are coded PS, as well as offers to share or help. The use of routine polite phrases ("May I," "please," etc.) are not PS, unless they are promoted by the caregiver in a discussion of manners.

Examples:

- Caregiver says to focus child, "Say the magic word, 'please'."

- Focus child retrieves and returns ball that has fallen from the baby's lap.
- Focus child offers to share her wagon with another child.
- Focus child rushes to the caregiver and tells her the gate to the yard is open.
- Focus child puts her arm around child who is crying and asks, "What's the matter?"
- Focus child is asked by the caregiver how she feels about having a new baby sister.
- Focus child is crying, and caregiver picks her up and hugs her.

AF = Affection: Verbal and nonverbal displays of affection, such as kissing, hugging, "I love you," personal compliments; social games including tickling and peek-a-boo, and playful teasing and joking.

Examples:

- Focus child gives a kiss to the caregiver upon leaving for the day.
- Focus child leans over and hugs a playmate in the sandbox.
- Focus child and a friend are tickling each other.

DS = Distress: Focus child is exhibiting signs of distress; he is woebegone, on the verge of tears (eyes filling, chin is trembling), or crying. (Note: a child receiving comfort while in distress is coded as receiving PS.)

Examples:

- Focus child cries after falling off the slide.
- Focus child has received a scolding from the caregiver; he walks away with tears in his eyes.

AT = Attention-seeking: Focus child either seeks attention of another or another seeks attention from him. Playful teasing as an attention-seeking device is coded here (otherwise code AF), as well as asking for help.

Examples:

- Focus child is tapping another child's shoulder.
- Focus child calls out, "Look at me, John."
- Focus child lifts arms to caregiver in hopes of being picked up.
- Playmate calls out to focus child, "Look at me, Martha, look at me."
- Focus child tries to sneak a cracker from the caregiver's plate.

AS = Antisocial: Focus child is fighting, being naughty, tattling, arguing, engaged in nasty or hostile teasing or intrusions, bullying, or threats. AS is coded when the focus child strikes out, pushes, or speaks unkindly (even as a defense measure). When the focus child tells caregiver about another's behavior, and his intent is to get the other child in trouble, code AS. (Note: If the focus child is actively antisocial, negative emotion (-) will be coded with AS.)

Examples:

- Focus child has been tripped by a playmate and says, "I'm going to tell Mrs. Jones on you."
- Focus child joins others in teasing a child who has wet his pants.

CN = Control: Focus child is either being restricted or is restricting or controlling someone else. Control is simple physical or verbal restraint; it is not nasty, i.e., nothing hurtful is intended (otherwise code AS). A child who is being disciplined by an adult is coded here.

Examples:

- Focus child removes a stick from a younger child's hand and says, "No, no!"
- Caregiver asks focus child to stop bothering a playmate.
- Caregiver sends focus child into the house because she has been misbehaving.
- Focus child is being spanked by the caregiver.

DP = Dramatic Play: Focus child engages in role play, representational play. DP may occur with dolls and cars, but there must be clear evidence that materials are symbolic of "real" objects. Dramatic play is often stimulated by the use of props, but the child must be simulating a real life event and not just playing with toys. These activities often occur in a doll corner.

Examples:

- Focus child dresses up in high heels and pretends to go to the market.
- Focus child talks on a play telephone with her playmate.
- Focus child dons a cape and says, "I'm Superman," and runs about with the cape flowing out behind him.

LI = Language and Information: Focus child is engaged in, or directed to, activities that center around labeling, reading, counting, verbal skills, or activities that promote learning of non-routine information such as explaining how birds fly, what rabbits eat. LI also includes group discussions of non-routine information.

Examples:

- Focus child is listening to a story the caregiver is reading aloud.
- Focus child describes how rabbits hop and wiggle their noses.
- Focus child is telling a story to the caregiver's baby.

FS = Fine Motor, Structured: Focus child is engaged in small muscle activities likely to foster the development of eye-hand-spatial coordination; activities that require precision, sequencing, a systematic approach to achieve the mastery required for success (fitting, stacking, building, drawing, tying, cutting, measuring, matching/ordering shapes and sizes). These activities are usually goal-oriented; there is a right and wrong way to perform them. They often involve specially designed toys, tools, and mechanisms with moving parts. Activities in which the child uses paint brushes, pencils, crayons, scissors, and cookie cutters are coded FS.

Examples:

- Focus child practices tying her shoes.
- Focus child is working on a puzzle.
- Focus child cuts out paper dolls.
- Focus child shows another child how to play checkers.
- Focus child threads a needle.

FE = Fine Motor, Exploratory/Sensory: Focus child engages in small muscle activities of an exploratory nature. These activities are less precise, less manipulative, and less goal-oriented than fine motor, structured activities. The FE code includes sensory information--taking in sounds and the feel of things.

Examples:

- Focus child makes a finger painting.
- Focus child plays in the sand with cars and shovels.
- Focus child puts a ball in his mouth and chews and sucks on it.
- Focus child bangs a spoon against a pan.

WK = Work: Focus child is engaged in household errands for the caregiver or in other household tasks, chores, such as washing up, setting the table, cleaning up, picking up, cooking, sweeping, raking. (Note: these activities are real work with no quality of pretend.)

Examples:

- Focus child assists caregiver in bringing the food to the table.

- Focus child helps caregiver fold the towels.
- Focus child and caregiver put the baby's toys away.

MD = Music/Dance: Focus child is playing musical instruments, singing, dancing, and listening to music. If no other activity is occurring, code humming or whistling as MD.

Examples:

- Focus child sings the alphabet. (If learning it, code LI.)
- Focus child dances to a song on the radio. (Not GM.)
- Focus child plays the piano. (Not FS.)

GM = Gross Motor: Focus child is engaged in activities or play that involves the use of the large muscles of the arms and legs. Running and skipping, even while in transit, are coded GM.

Examples:

- Focus child climbs over the edge into the sandbox.
- Focus child rides tricycle.
- Focus child chases his brother around the yard.
- Focus child and friend are wrestling.

PN = Physical Needs: Focus child is involved in eating, dressing, washing, being diapered and self-care tasks such as feeding himself, dressing himself.

Examples:

- Focus child lies down on the floor and drinks a bottle of juice.
- Focus child puts on her swimming suit.
- Focus child's diaper is being changed by the caregiver.
- Focus child is drinking his juice at the table.

ET = Educational TV: Focus child is watching educational TV programs, such as documentaries, children's news, travelogs.

Examples:

- Focus child watches the program "Zoom."
- Focus child and caregiver are watching "Captain Kangaroo."
- Focus child and four other children are watching "Sesame Street."

NT = Noneducational TV: Focus child is watching other TV programs, including adult programs, such as talk shows, newscasts, commercials. If the focus child changes the channels on the TV set, code NT.

Examples:

- Focus child watches afternoon movie.
- Focus child watches "Lawrence Welk."
- Focus child and caregiver watch "As the World Turns."
- Focus child watches cartoons.

CV = Conversation: Focus child engages in routine conversation, social chit-chat with children or adults. No other activity is occurring.

Examples:

- Focus child and caregiver's child talk about their vacations.
- Focus child tells caregiver he got his hair cut.

NA = None Applies: None of the above activities is occurring or is appropriate to code. NA is also coded when focus child is in transit from one place to another, and is not running or skipping.

Examples:

- Focus child wanders aimlessly.
- Focus child watches from a distance as other children play.
- Focus child moves from inside to outdoors.

Auxiliary Column

Codes in the Auxiliary column are recorded only when it is appropriate to provide supplementary information about the focus child's activity. The column is divided by a horizontal line. Codes above the line describe comments that are made to or by the focus child. Codes below the line are recorded when the focus child is observing others or when he is wandering about aimlessly.

AR = Activity Related Comments: Focus child makes or receives comments or statements related to the activity or task at hand. (Note: AR is not coded for singing or reading.)

Examples:

- While coloring, focus child asks another child to pass a blue crayon.
- Focus child is playing with blocks and asks another child how high she should build the tower.
- Focus child is asked by caregiver to let her know when he is through painting at the easel.

NR = Non-Activity Related Comments: Focus child makes or receives comments or statements that are not related to the activity or task, or engages in routine conversation, social chit-chat with others.

Examples:

- Focus child mentions to friend that he went swimming yesterday.
- Focus child listens as caregiver tells her that they will have tacos for lunch.
- Focus child tells another child, "Look at my scar."
- Focus child asks caregiver, "Can we go to the Park today?"

MN = Monitors: Focus child is not participating at the moment; he is waiting for something or someone or he is observing other people or other activities.

Examples:

- Focus child has stopped swinging, and his full attention is on another group of children across the yard.
- Focus child stops drawing and watches another child as she draws a picture.
- Focus child looks closely at his friend as he eats his cracker.
- Focus child is seated at a table, waiting for the caregiver to provide the materials necessary to begin her activity.

BL = Blank/Wandering Aimlessly: Focus child is doing nothing, "tuned out," or wandering about without goal or purpose. He is not engaged in an activity or in an interaction.

Examples:

- Focus child wanders around the yard, not concentrating on anything or anyone.
- Focus child is at snack table and is neither eating nor interacting with any children. She is looking into space, and her thoughts appear to be elsewhere.

Whom Column

The Whom column describes persons (or animals) with whom the focus child is interacting. It also records when the focus child is not aware of others or is engaged in an activity alone.

SF = Self: Focus child is by himself or is absorbed by materials. He is not interacting with others.

YC = Young Child: Any child of 12 to 59 months with whom the focus child is interacting individually.

GP = Group: Two or more children, or child(ren) and adult(s), with whom the focus child is interacting simultaneously.

BA = Baby: Any child under 12 months of age with whom the focus child is interacting individually.

SA = School Age Child: Any child of 5 through 12 years of age with whom the focus child is interacting individually.

M1 = Primary Caregiver: Focus child is interacting with the caregiver who has the main responsibility for the children.

M2 = Secondary Caregiver: Focus child is interacting with an assistant caregiver or other person who has been given the responsibility of caring for the children in the primary caregiver's absence.

AD = Adult: Any adult(s) with whom the focus child is interacting. (Adults are defined as persons of 13 years of age or older.)

OB = Observer: Focus child is interacting with the observer during the three-second interval.

AN = Animal: An animal with whom the focus child is interacting.

Mode Column

The Mode column describes the manner of the focus child's interaction with others or his involvement in his activity.

AC = Active: Focus child initiates or responds to an interaction; he is actively involved in an activity or interaction.

Examples:

- Focus child asks the caregiver for more crackers.
- Focus child takes a flower from the caregiver.
- Focus child is putting puzzle together.

MU = Mutual: Focus child is mutually involved in an activity with another.

Examples:

- Focus child and a friend hug each other.
- Focus child and caregiver dance together.
- Focus child and a playmate arm wrestle.

RV = Receives: Focus child is the recipient of another's actions.

Examples:

- Older child puts focus child's plate in front of him on the table.
- Caregiver leans over and gives focus child a kiss.
- Focus child is pushed on swing by caregiver.
- Caregiver explains to focus child why it's necessary to wash his hands before lunch.

CHECKLISTS AND OBSERVATION SUMMARY

This section describes the two checklists and observation summary found on the last several pages of the ABC instrument's red booklet.

Nutrition Checklist

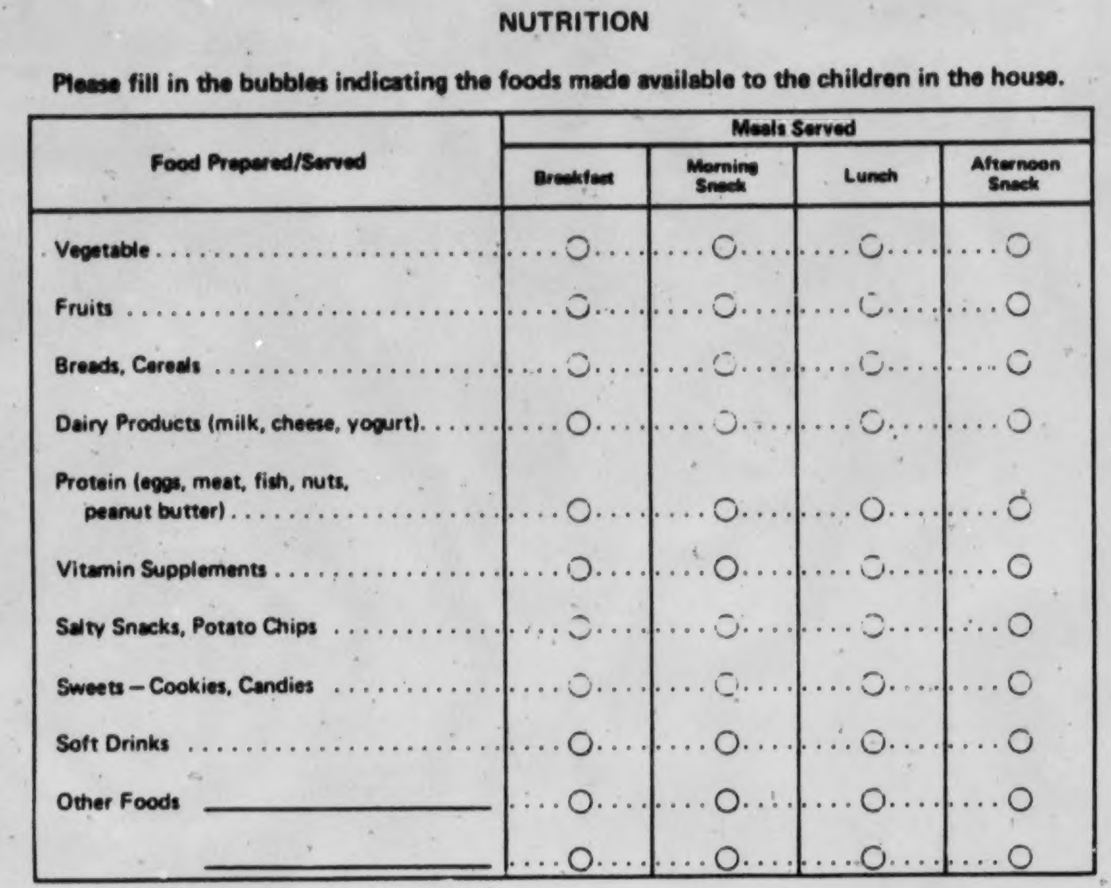
The nutrition checklist (see Figure B-3) will provide a record of the types of food prepared for and/or served to children at specific meals during the observation day. The observer will indicate the foods that were provided for the children at each meal, even if the children refused to eat certain foods or did not finish the meal. The observer is not to ask the caregiver what she is planning to serve; if the observer is ready to leave and the caregiver has not yet begun preparations for lunch, the observer will not be expected to complete the nutrition checklist for that meal.

The types of food prepared or served are defined as follows:

Vegetables include a variety of green or yellow fresh, frozen, or canned vegetables such as tomatoes, corn, beans, lettuce, cucumbers, celery, spinach, peas, chard, beets, potatoes (white, sweet, or yams), carrots, broccoli, and squash. Also included are vegetable soups and juices such as V-8 juice or tomato soup.

Fruits include an assortment of fresh, frozen,canned, or dried fruit, such as berries, grapes, bananas, avocados, peaches, apples, oranges, plums, prunes, pears, apricots, cherries, or melons. Also included are fruit juices such as orange juice, pear juice, grapefruit juice, or lemonade.

Breads, Cereals include muffins, bread, toast, dinner rolls, buns, bagels, crackers, corn meal bread, tortillas, and breakfast cereals such



NUTRITION

Please fill in the bubbles indicating the foods made available to the children in the house.

Food Prepared/Served	Meals Served			
	Breakfast	Morning Snack	Lunch	Afternoon Snack
Vegetable	○	○	○	○
Fruits	○	○	○	○
Breads, Cereals	○	○	○	○
Dairy Products (milk, cheese, yogurt)	○	○	○	○
Protein (eggs, meat, fish, nuts, peanut butter)	○	○	○	○
Vitamin Supplements	○	○	○	○
Salty Snacks, Potato Chips	○	○	○	○
Sweets – Cookies, Candies	○	○	○	○
Soft Drinks	○	○	○	○
Other Foods ____________	○	○	○	○
____________	○	○	○	○

Figure B-3: NUTRITION CHECKLIST

as Corn Flakes, granola, Alphabets, bran, or Cheerios. Cooked oatmeal, cooked whole wheat cereals, and grits are also coded here.

Dairy products (milk, cheese, yogurt) include various kinds of dairy products such as milk, buttermilk, chocolate milk, cheeses (e.g., cheddar, Velveeta, swiss, monterey jack), yogurt, cottage cheese, or cream cheese.

Protein includes eggs, meat, fish, nuts, peanut butter, and poultry.

Vitamin Supplements include any vitamins, such as Vitamin C or multiple vitamins. They may be found in liquid or pill form. Be careful to differentiate between vitamins and medication. If there is no way to tell the difference, do not mark anything.

Salty Snacks, Potato Chips include pretzels, corn chips, potato chips, Cheetos, popcorn, and the like.

Sweets--Cookies, Candies include cakes, pies, ice cream, candy, cookies, popsicles, chocolate-covered graham crackers, cinnamon graham crackers, doughnuts, sweet pastries, and the like.

Soft drinks include soda pop such as Coke, Pepsi, 7-Up, root beer, and artificially flavored fruit punches, such as Hawaiian punch, Tang, or Hi-C. Soft drinks also include any carbonated beverages as well as Kool-Aid and the like.

Other Foods include any food that does not fit into the above categories or that the observer finds difficult to categorize.

Physical Environment Checklist

The physical environment checklist (see Figure B-4) describes observable health and safety characteristics of the home, as well as facilities and materials provided for the children. The caregiver will not be asked about any of these items. The checklist is reproduced below in its entirety. A majority of the items are self-explanatory. However, definitions for those items requiring clarification follow.

4. Potty chairs, if needed: A potty chair is present for use by children who are being potty-trained and/or for those who are already potty-trained. A potty chair is needed when children struggle (by virtue of size) to use a standard toilet, or a child is uncomfortable or fearful of using a standard toilet and is in the process of toilet training. A potty chair is not needed when a child is in process of toilet training but comfortable with or capable of using a standard toilet. The item is "not applicable" for children who are obviously too young (1 year and younger) or too old (4 years and older).

9. Well-ventilated rooms: The rooms are not stuffy. If conditions are such that the weather is hot or the heater or fireplace create stuffiness, then mark "No." "Yes" would be marked if windows or doors are

PHYSICAL ENVIRONMENT CHECKLIST

Please indicate the presence or absence of the following items or facilities by filling in the appropriate circle. (Do not ask the caregiver about any of these items.)

	YES	NO	NO OPPORTUNITY TO OBSERVE OR NOT APPLICABLE
1. There is a quiet space available for napping.	○	○	○
2. Soap for children to wash with.	○	○	○
3. Towels available for children.	○	○	○
4. Potty chair, if needed.	○	○	○
5. Separate waterproof storage for soiled diapers (away from other items).	○	○	○
6. Clean diapers and/or clothing for changing.	○	○	○
7. Garbage containers clean and free of odors.	○	○	○
8. Floors, walls, ceilings, linens, furniture are reasonably clean.	○	○	○
9. Well-ventilated rooms.	○	○	○
10. Indoor temperature is not excessively hot or cold.	○	○	○
11. Toys clean and free of foods and/or other sticky substances.	○	○	○
12. Outdoor play area clean and litter-free.	○	○	○
13. Storage out of reach of children (for such things as first aid supplies, medicines, cleaning agents, firearms, chemicals, cosmetics).	○	○	○
14. Electric outlets covered, or out of reach.	○	○	○
15. Protective guards on all heating equipment in rooms used by children (i.e., supplemental heaters, fireplaces screened). (If not in use, mark NA.)	○	○	○
16. Steps free of broken boards, holes, etc.	○	○	○
17. Floors free of loose, broken tiles, boards, etc. that are unsafe.	○	○	○
18. Railings present and intact on steps (inside and outside).	○	○	○

Figure B-4: PHYSICAL ENVIRONMENT CHECKLIST

PHYSICAL ENVIRONMENT CHECKLIST

	YES	NO	NO OPPORTUNITY TO OBSERVE OR NOT APPLICABLE
19. Exterior doors and stairways are protected by latch or safety gates.	○	○	○
20. Fences and/or natural boundaries to restrict children from unsafe areas outdoors.	○	○	○
21. Outdoor play equipment used by children is in safe condition.	○	○	○
22. Indoor activity area free of dangerous litter, equipment, or objects that could fall on or hurt children.	○	○	○
23. Toys are safe for children's use.	○	○	○
24. Storage areas for toys and games are accessible for children.	○	○	○
25. Chairs and tables where children can work.	○	○	○
26. Special and separate room where children play.	○	○	○
27. At least one piece of age-appropriate large-muscle play equipment (e.g., scooter, tricycle, walker).	○	○	○
28. At least one age-appropriate eye-hand coordination toy available (e.g., beads, blocks, fit-together toys, pots and pans).	○	○	○
29. Literature and/or music available to children (e.g., books, records, musical instruments, music boxes).	○	○	○

Figure B-4: PHYSICAL ENVIRONMENT CHECKLIST (Concluded) opened or air conditioners or fans are used for appropriate ventilation. This does not apply to the observer's own feelings of stuffiness, but applies to observations of the children's reactions to their environment.

15. Protective guards on all heating equipment in rooms used by children (i.e., supplemental heaters, fireplace screens, etc.): All heating equipment, whether in use or not, must have some form of protective guard. If the fireplace has a screen and heaters have protective grills, mark "Yes." If not, mark "No." If there is no heating equipment, mark "NA."

18. Railings present and intact on steps (inside and outside): The observer should determine whether the children are protected from danger where there are 4 or more steps.

- If they are protected, mark "Yes."
- If children are not protected from dangerous situations on steps, mark "No."
- If the situation is not potentially dangerous, or if there are 3 or fewer steps, mark "NA."

20. Fences and/or natural boundaries to restrict children from unsafe areas outdoors: Fences or natural boundaries (e.g., shrubs) are used for safety; for example, there may be a hedge that keeps children in the yard and off the street, or a cyclone fence that prevents children from slipping into a ditch.

25. Chairs and tables where children can work: There are adult- or child-sized tables and chairs or counters where children can work on various activities such as painting, coloring, puzzles, and table-type toys.

26. Special and separate room where children play: The home contains a room that is specifically designed for children's play (often referred to as a "rec" room). It is not a bedroom or a livingroom. It can be a converted garage or a room that is designated solely as a playroom.

27. At least one piece of age-appropriate large muscle play equipment (e.g., scooter, tricycle, walker): All age groups must have at least one piece of age-appropriate large muscle play equipment. For example, 1 year olds may have a walker or a swing designed to hold them in on all sides. If the caregiver has three children all under age 2, a bicycle is not age-appropriate equipment, and the observer would mark "No." Large muscle equipment appropriate for infants includes cradle gyms, play pens, jumpers, and the like. Such equipment for toddlers includes push/pull toys, swings, tricycles, walking beams, small climbing grills, ladders, slides, and balls. Large muscle equipment for pre-schoolers includes jungle gyms, skateboards, scooters, roller skates, coasters, sleds, slides, jump ropes, wagons, bats and balls, swings, ladders, and the like.

28. At least one age-appropriate eye-hand coordination toy available (e.g., beads, blocks, fit-together toys, pots and pans): For infants, eye-hand coordination toys include cradle gyms, rattles, beads, and the like. Eye-hand coordination toys for toddlers and preschoolers include building blocks, puzzles, Leggo toys, Play-Doh, stacking/nesting cups, cars, toy typewriters, pressouts, pegboards, crayons, coloring books, Tinker-Toys, sorting cards, counting pegs, and items to go in and out of receptacles.

29. Literature and/or music available to children (e.g., books, records, musical instruments, music boxes): Story books, picture books, and magazines are included here. Musical instruments can include both toy and real instruments (e.g., harmonica, piano, coffee can made into a drum). Various kinds of music include classical, children's songs, contemporary music.

Observation Summary

The Observation Summary (see Figure B-5) describes the overall atmosphere of the home as determined by the observer's impression of certain behaviors. The Summary is completed after the observer leaves the home and, therefore, she will have to recollect whether there were occurrences

OBSERVATION SUMMARY

Please complete this questionnaire outside of the home as soon after the observation as possible.

A. Indicate the frequency of the following situations:	Did not occur	Occurred once	Occurred more than once
Physical conflict	○	○	○
Noisy and disruptive behavior	○	○	○
Children in distress	○	○	○
Apathetic and listless children	○	○	○
Potentially dangerous situations	○	○	○

Answer the next question only if there were infants in the home.

	Yes	No	Sometimes	No opportunity to observe
B. Caregiver smiled, talked, and played with infant, held and cuddled him/her. (This includes holding the baby while giving him a bottle.)	○	○	○	○

Please give your opinion about the following:

	Yes	No	Sometimes
C. Caregiver seemed to enjoy her work taking care of children.	○	○	○

Figure B-5: OBSERVATION SUMMARY

of the specified behaviors within the situation described in each item. When completing this section, the observer should ask herself the questions indicated under each Summary item below.

A. Indicate the frequency of the following situations: Physical conflict, noisy behavior, etc.

- If the behaviors or situation never occurred (or you do not remember that it occurred), code	Did Not Occur
- If the behavior or situation happened once or you remember one occurrence, code	Occurred Once
- If the behavior or situation occurred twice or more, code	Occurred More Than Once

B. Caregiver smiled, talked, and played with infant, held and cuddled him/her.

Q: Was there an infant in the home? If no, code	No Opportunity to Observe
Q: If yes, did the caregiver:	
- always smile, talk/play with, hold, and cuddle him?	Yes /Frequently
- never smile, talk/play with, hold, and cuddle him?	No /Never
- sometimes (but not always) smile, talk/play with, hold, and cuddle him?	Sometimes

C. Caregiver seemed to enjoy her work taking care of children.

- Do you think the caregiver likes her work?	Yes /Frequently
- Do you think the caregiver dislikes her work?	No /Never
- Do you think the caregiver enjoys her work sometimes but not all the time?	Sometimes

STRUCTURED SITUATION REGRESSIONS

STRUCTURED SITUATIONS

The purpose of the structured situations is to introduce uniform situations into all homes being studied. It is anticipated that the structured situations will elicit certain key caregiver behaviors that may not appear in natural situations and will provide an opportunity to compare caregiver behavior across homes. Two structured situations will be introduced in each home visited in the Phase III study. These situations are the Book (Kitten for a Day by Ezra Jack Keats) and the Play-Doh Factory. The Book allows the caregiver an opportunity to encourage language skills in the children. The Play-Doh Factory may enable the caregiver to teach a fine-motor activity. It also requires that the children share and may, therefore, elicit socializing directions from the caregiver. Each situation will be introduced with a minimal amount of instruction from the observer. Observation instruments and amount of time spent will be different for both structured situations:

Situation	Instruments	Coding Time
Book	Book Tally	5 minutes
Play-Doh Factory	ABC	up to 20 minutes

The following sections describe the behavioral definitions for the Book Tally, guidelines for coding the ABC in the Play-Doh Factory situation, as well as the procedures for administering each of the structured situations. Both structured situations will be introduced and demonstrated to the caregiver before she presents them to the children.

Note: In homes where all children are under 2 years of age, neither of the structured situations will be administered. If at least one child over the age of 2 years is present, the structured situations will proceed as usual.

The Book Tally

The observer will use a Book Tally, which was developed to record more specific teaching behaviors than can be recorded on the Carew-SRI Observation System. A copy of the Book Tally appears in Figure B-6. Unlike the ABC instrument, the Book Tally is used to observe specific caregiver behaviors whenever they occur during a 5-minute period, rather than 3-second intervals.

The observer will start tallying behaviors when the caregiver begins to show the book to the children. Coding will stop after 5 minutes, even if the caregiver continues to work with the book. If the caregiver finishes before 5 minutes, the observer will stop coding the Book Tally.

Observers must complete the information at the top of the tally sheet before and immediately after the caregiver reads the book. "Total number of children present in home during reading" refers to all children who are in the home during the book reading. "Total number of children attending to book at start" refers to all children who are close to the caregiver and attentive to the caregiver's reading. This does not include children in the same room who are engaged in another activity. "Total number of children attending to book at finish" refers to the number of children attending at the end of the coding period. The times at which the caregiver begins and stops reading or showing the book should be entered in the appropriate spaces. Note that "Time stop reading/showing" refers to the caregiver's stopping time, not necessarily to the 5-minute period.

Seven teaching behaviors are listed on the Book Tally sheet. Observers are to record the number of times each behavior is demonstrated by the caregiver during a 5-minute period. A check or tally mark for each occurrence is to be used. Definitions and examples of these items follow.

Refers to feelings--Caregiver either encourages a child to talk about or explain his feelings or directs the child's attention to a feeling or emotion. Examples: "How do you feel when you see a mouse?" "Those kittens are sad to see the dog leave." "Look at the happy little dog!"

BOOK TALLY

SRI USE

OBSERVER # 2 ☐☐☐ B/W/H/O 5 ☐ 10 Date 15 ☐☐☐☐☐☐

NAME ______________________

RELIABILITY OBSERVER # 6 ☐☐☐ 9 ☐ CAREGIVER # 17 ☐☐☐☐ 20

NAME ______________________ NAME ______________________

Total # children present in home during reading 24 ☐☐ M/F 22 ☐ B/W/H/O 23 ☐

Total # children attending to book at start 26 ☐☐

Total # children attending to book at finish 28 ☐☐

Time begin __:__ Time stop reading/showing __:__ Total time reading/showing 30 ☐☐ mins.

Caregiver's use of language: EN/SP/BO 32 ☐

	TALLY	TOTAL	
A. Refers to feelings (Encourages, explains, suggests)			33-34
B. Refers to experiences (Encourages, explains, suggests)			35-36
C. Encourages to respond/ Asks for information			37-38
D. Explains/Elaborates/ Labels			39-40
E. Suggests/Directs to specifics			41-42
F. Positive reinforcement/ Acknowledgment			43-44
G. Corrective feedback			45-46

Comments:

Figure B-6: SAMPLE OF BOOK TALLY

Refers to experiences--Caregiver encourages a child to talk about or describe his own experiences. Examples: "What would your mother want you to do?" "That looks like your kitten." "Your kitten is black and white, too." "Do you feed milk to your kitten?"

Encourages to respond/Asks for information--Caregiver addresses questions, directions, or encouragement (other than those regarding feelings and experiences) to one or more children to elicit a verbal response about the book of topics connected with the book. Examples: "What do you think the dog is thinking about?" "What do you think this is?" "Where are they going?" "Show me the puppy." "Which is your favorite page?" "Tell me what you think of this." Exceptions: any encouragement or questions regarding feelings or experiences.

Explains/Elaborates/Labels--Caregiver comments or provides information about the book or topics connected with the book, elaborates on the story, or labels pictures in the book. Examples: "The dog is drinking water." "Dogs cannot do things cats do." "That's a cat." "Those are cute little kittens." "Then the book says..." Exceptions: any explanation concerning feelings or experiences.

Suggests/Directs to specifics--Caregiver suggests the children look at something or points out something in the book to the children. Examples: "Look at that!" "See the kitten?" "Look at the cute little kittens!" "Oh, look!" Exceptions: any suggestions referring to feelings or experiences.

Positive reinforcement/Acknowledgment--Caregiver indicates a response is correct or praises or acknowledges a response. Examples: "Yes," "Right," "That's good," "Okay." An acknowledgement also includes the repetition of a child's response, e.g., "You think that looks like a puppy?" or "You like that one, huh?"

Corrective feedback--Caregiver indicates that a child's response is wrong, such as, "No, I don't think so" or "No, that's not a kitten; it's a dog."

Reading of the text and other caregiver behaviors not defined above will not be coded on the tally. Observers will learn the book so well that they will recognize what is being read and what the caregiver is adding to the story.

One mark will be recorded each time the caregiver demonstrates one of the seven verbal behaviors defined above. The caregiver may demonstrate several of these behaviors without a pause; in that case, all appropriate codes should be marked.

Additional information needed on the top half of the tally sheet will be filled in immediately after the caregiver finishes showing the book to the children. The total number of tally marks for each item will be entered in the "Total" column on the right.

The Play-Doh Factory

The Play-Doh Factory is a plastic toy from which children can squeeze out Play-Doh in several different shapes. The Play-Doh is placed into the factory, the handle pressed, and the Play-Doh squeezed out through an opening. A template is inserted at the opening so that the Play-Doh can come out in a variety of forms. The Play-Doh can be cut off with a plastic knife. Because it is difficult for young children to push the handle, two plastic cookie cutters will also be provided for use in homes with children younger than 2 years of age.

After she assists in spreading the drop cloth, the observer will start coding when the caregiver begins to show or talk about the factory to the children. Coding will stop when the caregiver says they are finished or after 20 minutes, whichever comes first. The observer should help put away the factory. The observer will leave only the Play-Doh and factory at the home. Cookie cutters and drop cloth will be taken away and cleaned by the observer after each use.

When recording behaviors and interactions during the use of the Play-Doh Factory, the observers will use the ABC as it is defined and used for the natural observations.

The following are typical situations that occur during the Play-Doh Factory activity and the appropriate coding for them.

- Caregiver makes shapes with the cookie cutter or factory: TE-FS
- Caregiver names the designs on the template: TE-LI
- Caregiver shows how to press the Play-Doh to make it flat: TE-FE
- Caregiver names the shape made by the cookie cutter or by the template: TE-LI
- Caregiver suggests that a child try using the factory: DR-FS
- Caregiver gives children the Play-Doh: HP-FE
- Caregiver opens the Play-Doh can for a child: HP-FS
- Caregiver tells a child to share with another: TE-PS
- Caregiver watches the children as they play: SV
- Caregiver demonstrates how to slide in the template: TE-FS
- Caregiver holds a child's hand as they cut the Play-Doh with the plastic knife: HP-FS
- Caregiver and children mash the Play-Doh out on the table (not with the cookie cutters, factory or knife): PP-FE
- Caregiver "eats" the pretend cookie a child has offered: PP-DP

Procedures for Administering the Structured Situations

At the agreed upon time (preferably 11:30 a.m.), the observer will ask the caregiver:

DOES THIS SEEM LIKE A GOOD TIME TO SHOW YOU THE BOOK AND TOY? (If yes, continue) GOOD. FIRST, I'D LIKE YOU TO SHOW THE CHILDREN THIS BOOK, KITTEN FOR A DAY (Show cover, title page, and pages 2-5). THIS IS A STORY ABOUT A PUPPY (turn pages to "Are you a kitten?") WHO DOESN'T KNOW HE'S NOT A KITTEN AND (turn page to "OK, follow us") SPENDS AN ENTIRE DAY TRYING TO DO (turn page to "Lap, lap, lap") WHAT KITTENS DO (turn few more pages to "Meee...rruff" and close book, saying...)

AFTER YOU'VE SHOWN THE BOOK, I'D LIKE YOU TO PRESENT THIS PLAY-DOH FACTORY. PLEASE SHOW THE CHILDREN HOW IT WORKS AND SUPERVISE THEM WHILE THEY PLAY WITH IT. HERE'S HOW IT WORKS: THE PLAY-DOH GOES IN THIS HOLE; A TEMPLATE SLIDES IN HERE, THEN YOU PUSH THE HANDLE DOWN AND THE PLAY-DOH COMES OUT THERE. YOU CAN CUT IT OFF WITH THIS KNIFE IF YOU WISH. HERE ARE SOME COOKIE CUTTERS THAT MAY ALSO BE USED WITH THE PLAY-DOH.

WHEN YOU FEEL YOU ARE READY, PLEASE GATHER ALL THE CHILDREN AND START WITH THE BOOK.

If the caregiver asks when or how, the observer will say, IT'S UP TO YOU. WHATEVER YOU THINK IS BEST. When the observer spreads the drop cloth, she will say: YOU CAN STOP WHEN YOU THINK THE CHILDREN ARE FINISHED.

If the caregiver asks whether she is to play with the children as they play with the Play-Doh, whether she is to let one child work with it at a time, etc., the observer says, IT'S UP TO YOU. WE JUST WANT YOU TO SHOW THEM HOW IT WORKS AND TO SUPERVISE THEM.

Spanish Translation of Structured Situations Introduction

¿Tiene tiempo ahorita para que le enseñe el libro y el juguete? Muy bien. Primoro, quisierá que les enseñe el libro "Kitten For a Day"/"Un Gatito Por El Dia" a los niños. El libro es tocante un perrito que piensa que es un gatito y pasa todo el dia tratando de ser gatito.

Después de que les enseñe el libro, quisierá que les demuestre la Fábrica de "Play-Doh." Por favor que les demuestre como se usa y de supervisarlos mientras ellos juegan con la Fábrica. Así es como se usa: el "Play-Doh" se pone en este hoyito; el molde se mete aquí; luego se apreta la mano y el play-doh sale por aquí. El "Play-Doh" se puede cortar con un cuchillo si desea. Aquí hay unos modelos que tambien se pueden usar con el "Play-Doh."

Cuando Ud. se siente que esté lista, por favor que junte a todos los niños y empieze con el libro.

When the observer spreads the drop cloth, she will say: Puede pararlos cuando piense Ud. que los niños han terminado. If the caregiver asks where or how, the observer will say: Donde quiera y en la manera que Ud. guste. If the caregiver asks whether she is to play with the children as they play with the Play-Doh, whether she is to let one child work with it at a time, etc., the observer says: Como Ud. desee. Solo queremos que les demuestre como usarlo y que los supervise.

Fall, 1978
NDCHS, III

DAILY LOG

Observer name: ______________________ No.________ Date________________

Caregiver name: ______________________ No.________ Booklet Nos.______________

Observations took place in a: House _____ Apartment _____

---

1. Describe interruptions, problems, or unusual happenings that may make the data invalid or that prevented you from completing the work (cite booklet number, FMO, and frame(s) please); describe events or behaviors that were difficult to code.

---

2. Comment on the following behaviors taken from the Observation Summary, if appropriate: Caregiver is consistent and firm; attends to children's physical needs; protects them from danger; encourages children to share and play together; is warm and positive when talking to the children; involves herself in children's play activities; cuddles or shows affection to the children.

---

3. If you wish, describe caregiver attitudes and/or your own feelings.

(Use reverse side for additional comments)

FOR SITE COORDINATOR'S USE ONLY

CAREGIVER INFORMATION

Age	Sex	Ethnicity	Education	Day Care Experience (in years)	Status
	F	B	H-		Licensed
	M	W	HS		Unlicensed
0 0		H	H+	0 0	Sponsored
1 1		O	BA	1 1	
2 2			U+	2 2	
3 3				3 3	
4 4				4 4	
5 5				5 5	
6 6				6 6	
7 7				7 7	
8 8				8 8	
9 9				9 9	

NUMBER OF HOURS PER WEEK IN THE HOME:

Child 1		0	1	2	3	4	5	6	7	8	9
		0	1	2	3	4	5	6	7	8	9

Child 2		0	1	2	3	4	5	6	7	8	9
		0	1	2	3	4	5	6	7	8	9

371

Table C-1

MEANS OF INDEPENDENT VARIABLES FOR EACH OF SEVERAL SAMPLES OF OBSERVATION DATA

Independent Variables	Natural Situations Total	Natural Situations Child 1	Natural Situations Child 2	Structured Situations Total	Structured Situations Child 1	Structured Situations Child 2
1. Binary on San Antonio vs others	0.3750	0.4074	0.3677	0.4048	0.4244	0.4454
2. Binary on Philadelphia vs others	0.2973	0.2634	0.2968	0.2667	0.2267	0.2437
3. Binary on Regulated vs others	0.3716	0.4033	0.3742	0.3571	0.3953	0.3361
4. Binary on Unregulated vs others	0.3311	0.3169	0.3097	0.3286	0.3023	0.3277
5. Binary on Black homes vs others	0.3311	0.3498	0.3032	0.3048	0.3140	0.2437
6. Binary on White homes vs others	0.4223	0.3868	0.4774	0.4238	0.3953	0.5042
7. Number of children less than 12 months	0.3818	0.4198	0.3548	0.3524	0.3721	0.3193
8. Number of children 12-35 months	1.8818	2.1523	1.6000	1.8238	2.1105	1.5966
9. Number of children 36-59 months	1.1419	0.9465	1.8452	1.1190	0.9651	1.5630
10. Number of children 59+ months	0.3446	0.3374	0.4323	0.3476	0.3430	0.3529
11. Caregiver age in years	42.9966	43.7942	42.2645	42.3667	42.9244	41.7227
12. Caregiver experience in years	7.1265	7.4564	7.0905	7.0934	7.3656	7.0552
13. Caregiver education in years	11.3277	11.3128	11.4065	11.2810	11.2442	11.3697
14. Child is caregiver's child	-0.2297	-0.2757	-0.2129	-0.1429	-0.1512	-0.1933
15. Child is relative of caregiver	-0.5946	-0.5802	-0.6387	-0.6667	-0.6395	-0.6975
16. Standard deviation of child ages (in months) excluding infants	12.1307	12.6252	13.5251	13.1006	13.9957	13.0738
17. Average age of children (in months) excluding infants	33.9737	31.5859	39.2558	35.4652	33.3632	38.1033
18. Ratio of female children in home	0.4828	0.4920	0.4738	0.4893	0.5104	0.4608
19. Ratio of Black children in home	0.322[illegible]	0.3333	0.2927	0.2933	0.2982	0.2264
20. Ratio of White children in home	0.4044	0.3780	0.4483	0.4010	0.3778	0.4555
21. Ratio of Hispanic children in home	0.2151	0.2241	0.1972	0.2431	0.2556	0.2400

Appendix C

MEANS OF INDEPENDENT VARIABLES FOR EACH OF SEVERAL SAMPLES OF OBSERVATION DATA

Appendix D

SUMMARY TABLES FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLES

Focus Child 1 Regressions
Focus Child 2 Regressions
Adult Behavior Regressions
Structured Situation Regressions

FOCUS CHILD 1 REGRESSIONS

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE
DEPENDENT VARIABLE "CHILD 1 ENGAGES IN PROSOCIAL ACTIVITY"
(n = 243)

Dependent Variable: C1V01

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.069	-.149	0.941
BINSITE1	Binary on San Antonio vs others	-.098	.036	0.031
BINSITE2	Binary on Philadelphia vs others	.209	.389	4.335*
BINSTAT1	Binary on Regulated vs others	.028	-.198	0.863
BINSTAT2	Binary on Unregulated vs others	-.126	-.014	0.005
BINETH1	Binary on Black homes vs others	.034	-.312	1.546
BINETH2	Binary on White homes vs others	-.037	-.314	1.696
NCTO12C	Number of children less than 12 months	.072	.037	0.276
NC1235C	Number of children 12-35 months	.101	.035	0.201
NC3659C	Number of children 36-59 months	-.035	-.037	0.214
NC59PLC	**Number of children 60+ months**	-.017	.051	0.261
MACGAGE	Caregiver age in years	-.009	-.031	0.098
MACGEXP	Caregiver experience in years	.062	.087	1.051
MACGEDUC	Caregiver education in years	-.036	-.049	0.343
CGCHILD	**Caregiver's child is present**	.002	.034	0.153
CGREL	**Caregiver's relative is present**	-.016	.018	0.058
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.076	.001	0.000
AVGAGEC	**Average age of children (in months) excluding infants**	-.078	-.066	0.226
RATEFEMC	Ratio of female children in home	-.061	-.083	1.409
RBLACK	Ratio of Black children in home	.061	.127	0.327
RWHITE	Ratio of White children in home	.006	.139	0.582
BS1ST1	Interaction of San Antonio Regulated homes vs others	.025	.087	0.215
BS1ST2	Interaction of San Antonio Unregulated homes vs others	-.149	-.090	0.232
BS1E1	Interaction of San Antonio Black homes vs others	-.064	.056	0.171
BS1E2	Interaction of San Antonio White homes vs others	-.084	-.016	0.011
BS2ST1	Interaction of Philadelphia Regulated homes vs others	.087	-.097	0.509
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.067	-.066	0.245
BS2E1	Interaction of Philadelphia Black homes vs others	.127	-.134	0.772
BST1E1	Interaction of Regulated Black homes vs others	.052	.138	0.693
BST1E2	Interaction of Regulated White homes vs others	-.017	.068	0.103
BST2E1	Interaction of Unregulated Black homes vs others	-.077	-.062	0.165
BST2E2	Interaction of Unregulated White homes vs others	-.075	-.072	0.157

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05, F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.118$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN AFFECTIONATE BEHAVIOR"

(n = 243)

Dependent Variable: C1V02

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.179	.316	4.557*
BINSITE1	Binary on San Antonio vs others	.184	-.029	0.021
BINSITE2	Binary on Philadelphia vs others	-.111	.084	0.217
BINSTAT1	Binary on Regulated vs others	-.036	-.079	0.149
BINSTAT2	Binary on Unregulated vs others	.026	-.444	5.470*
BINETH1	Binary on Black homes vs others	-.081	.262	1.178
BINETH2	Binary on White homes vs others	.004	.026	0.012
NCT012C	Number of children less than 12 months	.096	-.076	1.268
NC1235C	Number of children 12-35 months	-.179	-.175	5.517*
NC3659C	Number of children 36-59 months	-.094	-.027	0.128
NC59PLC	Number of children 60+ months	-.071	-.039	0.170
MACGAGE	Caregiver age in years	.019	-.109	1.295
MACGEXP	Caregiver experience in years	-.014	.011	0.019
MACGEDUC	Caregiver education in years	-.101	-.071	0.774
CGCHILD	Caregiver's child is present	-.058	-.070	0.723
CGREL	Caregiver's relative is present	.028	-.012	0.027
STDAGEC	Standard deviation of child ages (in months) excluding infants	.001	.227	4.453
AVGAGEC	Average age of children (in months) excluding infants	-.083	-.289	4.703*
RATEFEMC	Ratio of female children in home	.062	.056	0.649
RBLACK	Ratio of Black children in home	-.128	-.144	0.454
RWHITE	Ratio of White children in home	.023	.161	0.846
BS1ST1	Interaction of San Antonio Regulated homes vs others	.065	.065	0.129
BS1ST2	Interaction of San Antonio Unregulated homes vs others	.108	.266	2.203
BS1E1	Interaction of San Antonio Black homes vs others	.113	.018	0.020
BS1E2	Interaction of San Antonio White homes vs others	.060	-.028	0.036
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.099	-.034	0.068
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.009	.173	1.802
BS2E1	Interaction of Philadelphia Black homes vs others	-.150	-.170	1.341
BST1E1	Interaction of Regulated Black homes vs others	-.103	.070	0.194
BST1E2	Interaction of Regulated White homes vs others	.016	.074	0.132
BST2E1	Interaction of Unregulated Black homes vs others	.078	.205	1.970
BST2E2	Interaction of Unregulated White homes vs others	-.019	.176	1.002

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.184

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 IN DISTRESS"

(n = 243)

Dependent Variable: C1V03

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.053	-.091	0.375
BINSITE1	Binary on San Antonio vs others	-.085	-.119	0.367
BINSITE2	Binary on Philadelphia vs others	-.049	-.105	0.338
BINSTAT1	Binary on Regulated vs others	-.018	-.085	0.170
BINSTAT2	Binary on Unregulated vs others	-.045	.220	1.324
BINETH1	Binary on Black homes vs others	.037	.038	0.025
BINETH2	Binary on White homes vs others	-.081	-.066	0.080
NCT012C	Number of children less than 12 months	-.114	-.095	1.969
NC1235C	Number of children 12-35 months	-.112	-.158	4.446*
NC3659C	Number of children 36-59 months	-.016	.133	2.975
NC59PLC	Number of children 60+ months	-.094	.065	0.461
MACGAGE	Caregiver age in years	.070	.161	2.751
MACGEXP	Caregiver experience in years	-.060	-.076	0.840
MACGEDUC	Caregiver education in years	-.070	.008	0.010
CGCHILD	Caregiver's child is present	.032	.089	1.146
CGREL	Caregiver's relative is present	.045	.036	0.246
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.040	.281	6.727*
AVGAGEC	Average age of children (in months) excluding infants	-.156	-.494	13.512*
RATEFEMC	Ratio of female children in home	.032	-.015	0.049
RBLACK	Ratio of Black children in home	.014	-.200	0.857
RWHITE	Ratio of White children in home	-.081	-.024	0.018
BS1ST1	Interaction of San Antonio Regulated homes vs others	-.027	.066	0.133
BS1ST2	Interaction of San Antonio Unregulated homes vs others	-.087	-.047	0.066
BS1E1	Interaction of San Antonio Black homes vs others	-.014	.074	0.322
BS1E2	Interaction of San Antonio White homes vs others	-.078	-.057	0.151
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.063	-.146	1.222
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	-.071	-.011	0.007
BS2E1	Interaction of Philadelphia Black homes vs others	.041	.232	2.456
BST1E1	Interaction of Regulated Black homes vs others	.033	.066	0.169
BST1E2	Interaction of Regulated White homes vs others	.018	.136	0.441
BST2E1	Interaction of Unregulated Black homes vs others	-.081	-.283	3.713
BST2E2	Interaction of Unregulated White homes vs others	.083	-.143	0.654

---

[*] These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.173

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 SEEKS ATTENTION OF CAREGIVER"

(n = 243)

Dependent Variable: C1V04

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.103	.031	0.047
BINSITE1	Binary on San Antonio vs others	.179	-.106	0.308
BINSITE2	Binary on Philadelphia vs others	-.192	.011	0.004
BINSTAT1	Binary on Regulated vs others	.039	.531	7.032*
BINSTAT2	Binary on Unregulated vs others	.021	-.076	0.167
BINETH1	Binary on Black homes vs others	-.134	.191	0.675
BINETH2	Binary on White homes vs others	.024	.107	0.223
NCT012C	Number of children less than 12 months	-.136	-.143	4.686*
NC1235C	Number of children 12-35 months	-.099	-.079	1.168
NC3659C	Number of children 36-59 months	-.075	.000	0.000
NC59PLC	Number of children 60+ months	-.042	.031	0.111
MACGAGE	Caregiver age in years	-.048	-.183	3.793
MACGEXP	Caregiver experience in years	.016	.045	0.310
MACGEDUC	Caregiver education in years	-.124	-.154	3.859
CGCHILD	Caregiver's child is present	-.022	-.104	1.649
CGREL	Caregiver's relative is present	.021	.039	0.314
STDAGEC	Standard deviation of child ages (in months) excluding infants	.026	.237	5.088*
AVGAGEC	Average age of children (in months) excluding infants	-.070	-.327	6.290*
RATEFEMC	Ratio of female children in home	.059	.059	0.795
RBLACK	Ratio of Black children in home	-.163	-.201	0.928
RWHITE	Ratio of White children in home	.092	.170	0.989
BS1ST1	Interaction of San Antonio Regulated homes vs others	.110	-.110	0.391
BS1ST2	Interaction of San Antonio Unregulated homes vs others	.131	.173	0.979
BS1E1	Interaction of San Antonio Black homes vs others	.031	.113	0.801
BS1E2	Interaction of San Antonio White homes vs others	.135	.256	3.226
BS2ST1	Interaction of Philadelphia Regulated homes vs others	.135	-.109	0.724
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	-.088	.080	0.401
BS2E1	Interaction of Philadelphia Black homes vs others	-.170	-.080	0.311
BST1E1	Interaction of Regulated Black homes vs others	-.058	-.227	2.123
BST1E2	Interaction of Regulated White homes vs others	-.049	-.573	8.379*
BST2E1	Interaction of Unregulated Black homes vs others	-.025	-.043	0.090
BST2E2	Interaction of Unregulated White homes vs others	.042	-.155	0.816

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.222$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN DRAMATIC PLAY"

(n = 243)

Dependent Variable: C1V05

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.069	-.076	0.264
BINSITE1	Binary on San Antonio vs others	-.143	.032	0.027
BINSITE2	Binary on Philadelphia vs others	.122	.195	1.186
BINSTAT1	Binary on Regulated vs others	.063	.093	0.205
BINSTAT2	Binary on Unregulated vs others	-.012	-.094	0.249
BINETH1	Binary on Black homes vs others	-.072	.043	0.032
BINETH2	Binary on White homes vs others	.103	-.099	0.183
NCT012C	Number of children less than 12 months	.193	.203	9.101*
NC1235C	Number of children 12-35 months	.074	.021	0.081
NC3659C	Number of children 36-59 months	.049	-.036	0.226
NC59PLC	Number of children 60+ months	.080	-.025	0.070
MACGAGE	Caregiver age in years	-.020	.039	0.162
MACGEXP	Caregiver experience in years	.024	.024	0.089
MACGEDUC	Caregiver education in years	.087	.046	0.325
CGCHILD	Caregiver's child is present	.053	.014	0.027
CGREL	Caregiver's relative is present	-.020	.050	0.483
STDAGEC	Standard deviation of child ages (in months) excluding infants	.067	-.013	0.015
AVGAGEC	Average age of children (in months) excluding infants	.107	.176	1.753
RATEFEMC	Ratio of female children in home	.197	.241	12.824*
RBLACK	Ratio of Black children in home	-.062	-.158	0.546
RWHITE	Ratio of White children in home	.128	-.015	0.007
BS1ST1	Interaction of San Antonio Regulated homes vs others	-.038	-.025	0.020
BS1ST2	Interaction of San Antonio Unregulated homes vs others	.119	.050	0.078
BS1E1	Interaction of San Antonio Black homes vs others	-.100	-.109	0.712
BS1E2	Interaction of San Antonio White homes vs others	-.096	-.245	2.840
BS2ST1	Interaction of Philadelphia Regulated homes vs others	.051	-.119	0.332
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.137	.012	0.009
BS2E1	Interaction of Philadelphia Black homes vs others	-.011	-.090	0.380
BST1E1	Interaction of Regulated Black homes vs others	.017	.040	0.063
BST1E2	Interaction of Regulated White homes vs others	.030	.140	0.480
BST2E1	Interaction of Unregulated Black homes vs others	-.093	.016	0.013
BST2E2	Interaction of Unregulated White homes vs others	.114	.240	1.873

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.189$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN LOOKING AT A BOOK"

(n = 243)

Dependent Variable: C1V06

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.179	-.255	2.970
BINSITE1	Binary on San Antonio vs others	-.185	.012	0.004
BINSITE2	Binary on Philadelphia vs others	-.007	-.123	0.469
BINSTAT1	Binary on Regulated vs others	.086	.552	7.276*
BINSTAT2	Binary on Unregulated vs others	-.051	.069	0.133
BINETH1	Binary on Black homes vs others	.080	.211	0.765
BINETH2	Binary on White homes vs others	.036	.289	1.559
NCTO12C	Number of children less than 12 months	-.119	-.139	4.274*
NC1235C	Number of children 12-35 months	.079	.106	2.054
NC3659C	Number of children 36-59 months	-.051	-.072	0.885
NC59PLC	Number of children 60+ months	.062	.129	1.821
MACGAGE	Caregiver age in years	.000	-.062	0.415
MACGEXP	Caregiver experience in years	.036	.084	1.046
MACGEDUC	Caregiver education in years	-.026	-.165	4.239*
CGCHILD	Caregiver's child is present	.026	.036	0.190
CGREL	Caregiver's relative is present	.001	.016	0.067
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.049	-.130	1.460
AVGAGEC	Average age of children (in months) excluding infants	-.048	-.035	0.068
RATEFEMC	Ratio of female children in home	-.030	-.016	0.058
RBLACK	Ratio of Black children in home	.095	-.079	0.138
RWHITE	Ratio of White children in home	.004	-.215	1.523
BS1ST1	Interaction of San Antonio Regulated homes vs others	-.128	-.364	4.108*
BS1ST2	Interaction of San Antonio Unregulated homes vs others	-.064	-.037	0.043
BS1E1	Interaction of San Antonio Black homes vs others	-.033	.009	0.005
BS1E2	Interaction of San Antonic White homes vs others	-.075	.005	0.001
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.012	-.158	1.424
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.001	.056	0.191
BS2E1	Interaction of Philadelphia Black homes vs others	.000	-.052	0.126
BST1E1	Interaction of Regulated Black homes vs others	.094	-.186	1.373
BST1E2	Interaction of Regulated White homes vs others	.024	-.228	1.268
BST2E1	Interaction of Unregulated Black homes vs others	-.001	-.109	0.556
BST2E2	Interaction of Unregulated White homes vs others	.006	-.072	0.171

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.187

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN LANGUAGE/INFORMATION WITH CAREGIVER"

(n = 243)

Dependent Variable: C1V07

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.156	-.181	1.774
BINSITE1	Binary on San Antonio vs others	-.136	.180	1.012
BINSITE2	Binary on Philadelphia vs others	.237	.514	9.725*
BINSTAT1	Binary on Regulated vs others	-.101	.099	0.277
BINSTAT2	Binary on Unregulated vs others	-.024	.049	0.080
BINETH1	Binary on Black homes vs others	.134	.222	1.004
BINETH2	Binary on White homes vs others	-.015	.135	0.403
NCT012C	Number of children less than 12 months	-.132	-.121	3.834
NC1235C	Number of children 12-35 months	-.074	-.075	1.217
NC3659C	Number of children 36-59 months	-.052	.030	0.180
NC59PLC	Number of children 60+ months	.273	.483	30.410*
MACGAGE	Caregiver age in years	-.056	-.034	0.150
MACGEXP	Caregiver experience in years	.005	.031	0.167
MACGEDUC	Caregiver education in years	.021	.005	0.004
CGCHILD	Caregiver's child is present	.037	.006	0.005
CGREL	Caregiver's relative is present	-.159	.097	2.158
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.071	-.290	8.665*
AVGAGEC	Average age of children (in months) excluding infants	.071	-.048	0.153
RATEFEMC	Ratio of female children in hom	.071	.045	0.534
RBLACK	Ratio of Black children in home	.137	-.212	1.163
RWHITE	Ratio of White children in home	.001	-.128	0.638
BS1ST1	Interaction of San Antonio Regulated homes vs others	-.112	-.102	0.383
BS1ST2	Interaction of San Antonio Unregulated homes vs others	-.030	-.044	0.071
BS1E1	Interaction of San Antonio Black homes vs others	-.079	-.155	1.719
BS1E2	Interaction of San Antonio White homes vs others	-.040	.059	0.196
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.026	-.207	5.677*
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.071	-.188	2.530
BS2E1	Interaction of Philadelphia Black homes vs others	.225	-.104	0.592
BST1E1	Interaction of Regulated Black homes vs others	.000	.021	0.022
BST1E2	Interaction of Regulated White homes vs others	-.089	-.203	1.190
BST2E1	Interaction of Unregulated Black homes vs others	.024	.007	0.002
BST2E2	Interaction of Unregulated White homes vs cthers	.003	-.089	0.306

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.314$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN STRUCTURED FINE MOTOR"
(n = 243)

Dependent Variable: C1V08

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.064	-.084	0.366
BINSITE1	Binary on San Antonio vs others	-.273	-.173	0.898
BINSITE2	Binary on Philadelphia vs others	.217	.642	14.626*
BINSTAT1	Binary on Regulated vs others	-.145	-.230	1.447
BINSTAT2	Binary on Unregulated vs others	-.052	-.319	3.235
BINETH1	Binary on Black homes vs others	-.135	-.289	1.651
BINETH2	Binary on White homes vs others	.141	-.257	1.414
NCT012C	Number of children less than 12 months	-.043	-.018	0.086
NC1235C	Number of children 12-35 months	.044	-.002	0.001
NC3659C	Number of children 36-59 months	-.010	-.033	0.213
NC59PLC	**Number of children 60+ months**	-.022	-.102	1.298
MACGAGE	Caregiver age in years	-.069	-.088	0.957
MACGEXP	Caregiver experience in years	.009	.057	0.548
MACGEDUC	Caregiver education in years	.041	-.051	0.4[illegible]2
CGCHILD	**Caregiver's child is present**	-.034	-.104	1.814
CGREL	**Caregiver's relative is present**	-.037	.006	0.009
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.047	-.101	1.003
AVGAGEC	**Average age of children (in months) excluding infants**	.043	.207	2.769
RATEFEMC	Ratio of female children in home	-.039	-.027	0.185
RBLACK	Ratio of Black children in home	-.117	-.064	0.101
RWHITE	Ratio of White children in home	.124	-.091	0.311
BS1ST1	Interaction of San Antonio Regulated homes vs others	-.161	.049	0.087
BS1ST2	Interaction of San Antonio Unregulated homes vs others	-.197	-.028	0.027
BS1E1	Interaction of San Antonio Black homes vs others	-.154	.020	0.026
BS1E2	Interaction of San Antonio White homes vs others	-.165	-.136	1.003
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.030	-.293	5.719*
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.166	-.148	1.516
BS2E1	Interaction of Philadelphia Black homes vs others	-.022	-.340	6.167*
BST1E1	Interaction of Regulated Black homes vs others	-.133	.160	1.65
BST1E2	Interaction of Regulated White homes vs others	-.040	.231	1.491
BST2E1	Interaction of Unregulated Black homes vs others	-.157	.153	1.267
BST2E2	Interaction of Unregulated White homes vs others	.158	.423	6.669*

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.290$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CHILD 1 ENGAGES IN EXPLORATORY FINE MOTOR ALONE"

(n = 243)

Dependent Variable: C1V09

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.093	.256	3.358
BINSITE1	Binary on San Antonio vs others	.316	.082	0.199
BINSITE2	Binary on Philadelphia vs others	-.116	-.383	5.075*
BINSTAT1	Binary on Regulated vs others	.110	.061	0.099
BINSTAT2	Binary on Unregulated vs others	.057	.033	0.035
BINETH1	Binary on Black homes vs others	.107	.362	2.520
BINETH2	Binary on White homes vs others	-.086	.175	0.637
NCT012C	Number of children less than 12 months	.116	.055	0.745
NC1235C	Number of children 12-35 months	-.066	-.083	1.405
NC3659C	Number of children 36-59 months	.113	.124	2.945
NC59PLC	Number of children 60+ months	-.017	.038	0.180
MACCGAGE	Caregiver age in years	-.045	-.036	0.159
MACCGEXP	Caregiver experience in years	-.019	-.060	0.607
MACCGEDUC	Caregiver education in years	-.070	-.045	0.352
CGCHILD	Caregiver's child is present	.077	.059	0.571
CGREL	Caregiver's relative is present	-.055	-.082	1.455
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.009	-.047	0.216
AVGAGEC	Average age of children (in months) excluding infants	-.029	-.099	0.617
RATEFEMC	Ratio of female children in home	.033	.024	0.143
RBLACK	Ratio of Black children in home	.083	-.001	0.000
RWHITE	Ratio of White children in home	-.088	.062	0.140
BS1ST1	Interaction of San Antonio Regulated homes vs others	.260	.142	0.696
BS1ST2	Interaction of San Antonio Unregulated homes vs others	.131	.139	0.672
BS1E1	Interaction of San Antonio Black homes vs others	.118	.020	0.027
BS1E2	Interaction of San Antonio White homes vs others	.253	.130	0.891
BS2ST1	Interaction of Philadelphia Regulated homes vs others	-.080	.090	0.528
BS2ST2	Interaction of Philadelphia Unregulated homes vs others	.035	.267	4.186*
BS2E1	Interaction of Philadelphia Black homes vs others	.070	.290	4.361*
BST1E1	Interaction of Regulated Black homes vs others	.090	.005	0.001
BST1E2	Interaction of Regulated White homes vs others	.034	-.025	0.017
BST2E1	Interaction of Unregulated Black homes vs others	.101	-.073	0.277
BST2E2	Interaction of Unregulated White homes vs others	-.031	-.066	0.159

*These F ratios are significant at $p < .05$.

For $p = < .05, F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.273

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN EXPLORATORY FINE MOTOR ACTIVITY WITH YOUNG CHILD"

(n = 243)

Dependent Variable: C1V10

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.036	.060	0.147
BINSITE1	Binary on San Antonio vs others	.024	.024	0.014
BINSITE2	Binary on Philadelphia vs others	-.081	-.375	3.940*
BINSTAT1	Binary on Regulated vs others	-.031	-.157	0.535
BINSTAT2	Binary on Unregulated vs others	-.041	-.181	0.824
BINETH1	Binary on Black homes vs others	-.022	.119	0.222
BINETH2	Binary on White homes vs others	.070	-.005	0.000
NCT012C	Number of children less than 12 months	.009	.018	0.067
NC1235C	Number of children 12-35 months	.009	.048	0.383
NC3659C	Number of children 36-59 months	.109	-.000	0.000
NC59PLC	Number of children 60+ months	-.015	-.169	2.849
MACGAGE	Caregiver age in years	-.039	-.062	0.380
MACGEXP	Caregiver experience in years	.057	.121	1.974
MACGEDUC	Caregiver education in years	.049	-.018	0.044
CGCHILD	Caregiver's child is present	.046	.072	0.690
CGREL	Caregiver's relative is present	-.074	-.063	0.690
STDAGEC	Standard deviation of child ages (in months) excluding infants	.042	-.143	1.603
AVGAGEC	Average age of children (in months) excluding infants	.106	.312	4.972*
RATEFEMC	Ratio of female children in home	.017	.030	0.178
RBLACK	Ratio of Black children in home	-.043	.068	0.091
RWHITE	Ratio of White children in home	.071	.111	0.366
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.028	-.096	0.258
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.011	-.094	0.248
BS1E1	Interaction of San Antonio-Black homes vs others	.028	.060	0.198
BS1E2	Interaction of San Antonio-White homes vs others	.060	.018	0.014
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.067	.259	3.548
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.067	.071	0.274
BS2E1	Interaction of Philadelphia-Black homes vs others	-.065	.069	0.202
BST1E1	Interaction of Regulated-Black homes vs others	-.059	-.115	0.472
BST1E2	Interaction of Regulated-White homes vs others	.056	.056	0.070
BST2E1	Interaction of Unregulated-Black homes vs others	-.027	.059	0.151
BST2E2	Interaction of Unregulated-White homes vs others	.034	.106	0.333

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.100$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN EXPLORATORY FINE MOTOR WITH CAREGIVER" (n = 243)

Dependent Variable: C1V11

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.122	.068	0.233
BINSITE1	Binary on San Antonio vs others	.347	.500	7.205*
BINSITE2	Binary on Philadelphia vs others	-.221	-.148	0.740
BINSTAT1	Binary on Regulated vs others	-.117	.036	0.034
BINSTAT2	Binary on Unregulated vs others	.159	-.039	0.047
BINETH1	Binary on Black homes vs others	-.129	.227	0.968
BINETH2	Binary on White homes vs others	.053	.131	0.352
NCT012C	Number of children less than 12 months	-.070	-.026	0.160
NC1235C	Number of children 12-35 months	-.229	-.146	4.236*
NC3659C	Number of children 36-59 months	-.167	-.130	3.144
NC59PLC	Number of children 60+ months	-.064	.041	0.204
MACGAGE	Caregiver age in years	.076	-.071	0.605
MACGEXP	Caregiver experience in years	.103	.105	1.802
MACGEDUC	Caregiver education in years	-.021	.064	0.693
CGCHILD	Caregiver's child is present	-.123	-.085	1.150
CGREL	Caregiver's relative is present	.092	.060	0.760
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.067	.041	0.159
AVGAGEC	Average age of children (in months) excluding infants	-.060	-.141	1.229
RATEFEMC	Ratio of female children in home	-.020	-.003	0.002
RBLACK	Ratio of Black children in home	-.176	-.140	0.467
RWHITE	Ratio of White children in home	.099	.148	0.786
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.034	-.265	2.386
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.310	-.066	0.147
BS1E1	Interaction of San Antonio-Black homes vs others	.139	-.064	0.273
BS1E2	Interaction of San Antonio-White homes vs others	.183	-.003	0.001
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.105	.080	0.410
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.119	.004	0.001
BS2E1	Interaction of Philadelphia-Black homes vs others	-.178	.059	0.175
BST1E1	Interaction of Regulated-Black homes vs others	-.146	-.050	0.107
BST1E2	Interaction of Regulated-White homes vs others	-.014	-.118	0.373
BST2E1	Interaction of Unregulated-Black homes vs others	.070	.047	0.112
BST2E2	Interaction of Unregulated-White homes vs others	.083	-.010	0.004

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.256$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN WORK"

(n = 243)

Dependent Variable: C1V12

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.127	-.055	0.138
BINSITE1	Binary on San Antonio vs others	.073	.782	16.051*
BINSITE2	Binary on Philadelphia vs others	-.009	.256	2.021
BINSTAT1	Binary on Regulated vs others	-.031	-.243	1.402
BINSTAT2	Binary on Unregulated vs others	-.047	-.014	0.005
BINETH1	Binary on Black homes vs others	-.077	-.250	1.074
BINETH2	Binary on White homes vs others	-.078	-.422	3.307
NCT012C	Number of children less than 12 months	-.054	-.022	0.108
NC1235C	Number of children 12-35 months	.073	.103	1.918
NC3659C	Number of children 36-59 months	-.063	-.094	1.504
NC59PLC	**Number of children 60+ months**	-.060	.012	0.016
MACGAGE	Caregiver age in years	-.035	-.052	0.296
MACGEXP	Caregiver experience in years	.017	.067	0.672
MACGEDUC	Caregiver education in years	.083	.222	7.628*
CGCHILD	**Caregiver's child is present**	-.016	.000	0.000
CGREL	**Caregiver's relative is present**	-.008	.049	0.458
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.097	-.102	0.906
AVGAGEC	**Average age of children (in months) excluding infants**	-.053	.056	0.178
RATEFEMC	Ratio of female children in home	-.052	-.046	0.455
RBLACK	Ratio of Black children in home	-.073	-.050	0.054
RWHITE	Ratio of White children in home	-.033	.057	0.108
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.022	-.372	4.290*
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.025	-.455	6.430*
BS1E1	Interaction of San Antonio-Black homes vs others	-.078	-.313	5.885*
BS1E2	Interaction of San Antonio-White homes vs others	-.087	-.239	2.685
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.013	-.158	1.459
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.043	-.266	4.243*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.018	-.057	0.150
BST1E1	Interaction of Regulated-Black homes vs others	-.025	.321	4.066*
BST1E2	Interaction of Regulated-White homes vs others	-.031	.376	3.436
BST2E1	Interaction of Unregulated-Black homes vs others	-.058	.263	3.254
BST2E2	Interaction of Unregulated-White homes vs others	-.061	.160	0.827

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.185$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN MUSIC/DANCE"

(n = 243)

Dependent Variable: C1V13

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.085	-.071	0.234
BINSITE1	Binary on San Antonio vs others	-.068	.082	0.177
BINSITE2	Binary on Philadelphia vs others	-.058	-.202	1.274
BINSTAT1	Binary on Regulated vs others	.090	.150	0.537
BINSTAT2	Binary on Unregulated vs others	-.143	-.139	0.541
BINETH1	Binary on Black homes vs others	-.060	.217	0.814
BINETH2	Binary on White homes vs others	.144	.808	12.223*
NCT012C	Number of children less than 12 months	-.013	-.063	0.883
NC1235C	Number of children 12-35 months	.154	.106	2.027
NC3659C	Number of children 36-59 months	-.023	-.124	2.608
NC59PLC	**Number of children 60+ months**	-.041	-.084	0.778
MACGAGE	Caregiver age in years	-.072	-.089	0.860
MACGEXP	Caregiver experience in years	.062	.130	2.550
MACGEDUC	Caregiver education in years	.194	.099	1.524
CGCHILD	**Caregiver's child is present**	.014	.031	0.144
CGREL	**Caregiver's relative is present**	-.066	-.004	0.004
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.009	-.035	0.108
AVGAGEC	**Average age of children (in months) excluding infants**	-.012	.127	0.[illegible]14
RATEFEMC	Ratio of female children in home	-.006	.051	0.[illegible]78
RBLACK	Ratio of Black children in home	-.037	.081	0.146
RWHITE	Ratio of White children in home	.068	-.378	4.712*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.062	.040	0.049
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.126	.077	0.186
BS1E1	Interaction of San Antonio-Black homes vs others	-.079	-.156	1.473
BS1E2	Interaction of San Antonio-White homes vs others	-.003	-.130	0.797
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.025	.103	0.618
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.005	.189	2.159
BS2E1	Interaction of Philadelphia-Black homes vs others	-.124	-.196	1.795
BST1E1	Interaction of Regulated-Black homes vs others	.034	-.137	0.716
BST1E2	Interaction of Regulated-White homes vs others	.048	-.415	4.219*
BST2E1	Interaction of Unregulated-Black homes vs others	-.108	-.097	0.447
BST2E2	Interaction of Unregulated-White homes vs others	-.007	-.278	2.530

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.190

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN GROSS MOTOR ACTIVITY"

(n = 243)

Dependent Variable: C1V14

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.122	-.089	0.375
BINSITE1	Binary on San Antonio vs others	-.094	-.032	0.027
BINSITE2	Binary on Philadelphia vs others	-.057	-.115	0.420
BINSTAT1	Binary on Regulated vs others	.046	.063	0.098
BINSTAT2	Binary on Unregulated vs others	-.154	-.002	0.000
BINETH1	Binary on Black homes vs others	-.131	-.197	0.681
BINETH2	Binary on White homes vs others	-.027	.288	1.585
NCT012C	Number of children less than 12 months	-.025	-.028	0.172
NC1235C	Number of children 12-35 months	.152	.100	1.841
NC3659C	Number of children 36-59 months	.106	.164	4.668*
NC59PLC	Number of children 60+ months	-.106	-.123	1.685
MACGAGE	Caregiver age in years	.026	.053	0.314
MACGEXP	Caregiver experience in years	.006	-.031	0.148
MACGEDUC	Caregiver education in years	.010	.058	0.535
CGCHILD	Caregiver's child is present	-.088	-.084	1.049
CGREL	Caregiver's relative is present	.008	.029	0.166
STDAGEC	Standard deviation of child ages (in months) excluding infants	.026	.224	4.428*
AVGAGEC	Average age of children (in months) excluding infants	-.045	-.148	1.263
RATEFEMC	Ratio of female children in home	.032	.060	0.799
RBLACK	Ratio of Black children in home	-.087	.072	0.114
RWHITE	Ratio of White children in home	-.061	-.296	2.939
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.050	.115	0.420
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.171	.026	0.022
BS1E1	Interaction of San Antonio-Black homes vs others	-.166	-.199	2.436
BS1E2	Interaction of San Antonio-White homes vs others	-.123	-.190	1.743
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.022	.054	0.173
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.057	-.000	0.000
BS2E1	Interaction of Philadelphia-Black homes vs others	-.069	-.003	0.000
BST1E1	Interaction of Regulated-Black homes vs others	-.092	-.223	1.999
BST1E2	Interaction of Regulated-White homes vs others	.020	-.208	1.076
BST2E1	Interaction of Unregulated-Black homes vs others	-.117	-.034	0.057
BST2E2	Interaction of Unregulated-White homes vs others	-.132	-.192	1.223

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.204

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 WATCHES ANY TV ALONE"

(n = 243)

Dependent Variable: C1V15

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.104	-.061	0.173
BINSITE1	Binary on San Antonio vs others	-.160	-.102	0.277
BINSITE2	Binary on Philadelphia vs others	.152	-.321	3.264
BINSTAT1	Binary on Regulated vs others	.125	.026	0.016
BINSTAT2	Binary on Unregulated vs others	-.046	.042	0.050
BINETH1	Binary on Black homes vs others	-.130	-.150	0.393
BINETH2	Binary on White homes vs others	-.081	-.164	0.511
NCT012C	Number of children less than 12 months	.073	.046	0.477
NC1235C	Number of children 12-35 months	.062	.001	0.000
NC3659C	Number of children 36-59 months	-.119	-.124	2.681
NC59PLC	Number of children 60+ months	-.046	.021	0.048
MACGAGE	Caregiver age in years	-.053	.003	0.001
MACGEXP	Caregiver experience in years	-.088	-.059	0.537
MACGEDUC	Caregiver education in years	.052	.054	0.461
CGCHILD	Caregiver's child is present	.064	.057	0.485
CGREL	Caregiver's relative is present	-.025	-.010	0.020
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.138	-.244	5.240*
AVGAGEC	Average age of children (in months) excluding infants	-.132	.118	0.800
RATEFEMC	Ratio of female children in home	-.058	-.068	1.051
RBLACK	Ratio of Black children in home	.152	.058	0.076
RWHITE	Ratio of White children in home	-.082	.000	0.000
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.111	-.051	0.083
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.041	.012	0.004
BS1E1	Interaction of San Antonio-Black homes vs others	-.083	.002	0.000
BS1E2	Interaction of San Antonio-White homes vs others	-.073	.068	0.220
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.300	.317	5.962*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.022	.082	0.409
BS2E1	Interaction of Philadelphia-Black homes vs others	.218	.240	2.740
BST1E1	Interaction of Regulated-Black homes vs others	.260	.110	0.485
BST1E2	Interaction of Regulated-White homes vs others	-.024	.068	0.116
BST2E1	Interaction of Unregulated-Black homes vs others	-.029	-.035	0.060
BST2E2	Interaction of Unregulated-White homes vs others	-.042	.010	0.003

---

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.202

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 WATCHES EDUCATIONAL TV WITH SOMEONE"

(n = 243)

Dependent Variable: C1V16

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.012	.014	0.008
BINSITE1	Binary on San Antonio vs others	-.028	-.035	0.033
BINSITE2	Binary on Philadelphia vs others	.239	.246	1.907
BINSTAT1	Binary on Regulated vs others	.142	.421	4.277*
BINSTAT2	Binary on Unregulated vs others	-.070	.065	0.119
BINETH1	Binary on Black homes vs others	.024	-.060	0.064
BINETH2	Binary on White homes vs others	.069	-.016	0.005
NCT012C	Number of children less than 12 months	-.025	-.071	1.115
NC1235C	Number of children 12-35 months	.012	-.118	2.550
NC3659C	Number of children 36-59 months	.075	.059	0.603
NC59PLC	Number of children 60+ months	-.019	-.078	0.682
MACGAGE	Caregiver age in years	-.103	-.009	0.009
MACGEXP	Caregiver experience in years	.012	.009	0.012
MACGEDUC	Caregiver education in years	.046	.036	0.205
CGCHILD	Caregiver's child is present	.082	.024	0.082
CGREL	Caregiver's relative is present	-.161	-.128	3.257
STDAGEC	Standard deviation of child ages (in months) excluding infants	.118	.239	5.018*
AVGAGEC	Average age of children (in months) excluding infants	.030	-.126	0.910
RATEFEMC	Ratio of female children in home	-.085	-.095	2.024
RBLACK	Ratio of Black children in home	.020	.072	0.115
RWHITE	Ratio of White children in home	.069	.013	0.006
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.022	-.152	0.723
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.034	-.008	0.002
BS1E1	Interaction of San Antonio-Black homes vs others	-.070	.155	1.467
BS1E2	Interaction of San Antonio-White homes vs others	.094	.297	4.208*
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.259	.171	1.721
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.026	.048	0.142
BS2E1	Interaction of Philadelphia-Black homes vs others	.174	.014	0.009
BST1E1	Interaction of Regulated-Black homes vs others	.059	-.319	4.065*
BST1E2	Interaction of Regulated-White homes vs others	.086	-.318	2.500
BST2E1	Interaction of Unregulated-Black homes vs others	-.060	-.132	0.829
BST2E2	Interaction of Unregulated-White homes vs others	-.041	-.093	0.288

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.197$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 WATCHES NONEDUCATIONAL TV WITH SOMEONE"

(n = 243)

Dependent Variable: C1V17

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.004	-.205	2.008
BINSITE1	Binary on San Antonio vs others	.259	.276	2.094
BINSITE2	Binary on Philadelphia vs others	-.058	-.014	0.007
BINSTAT1	Binary on Regulated vs others	-.076	-.201	1.008
BINSTAT2	Binary on Unregulated vs others	.195	.223	1.448
BINETH1	Binary on Black homes vs others	-.071	-.264	1.254
BINETH2	Binary on White homes vs others	-.025	-.383	2.866
NCT012C	Number of children less than 12 months	-.077	-.074	1.260
NC1235C	Number of children 12-35 months	-.136	-.081	1.236
NC3659C	Number of children 36-59 months	-.015	.001	0.000
NC59PLC	Number of children 60+ months	-.075	-.083	0.792
MACGAGE	Caregiver age in years	.091	.111	1.407
MACGEXP	Caregiver experience in years	.014	-.101	1.602
MACGEDUC	Caregiver education in years	-.027	.049	0.383
CGCHILD	Caregiver's child is present	-.074	-.062	0.595
CGREL	Caregiver's relative is present	.078	.014	0.039
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.073	-.010	0.008
AVGAGEC	Average age of children (in months) excluding infants	.001	.064	0.241
RATEFEMC	Ratio of female children in home	.011	.024	0.130
RBLACK	Ratio of Black children in home	-.057	.197	0.889
RWHITE	Ratio of White children in home	.066	.273	2.550
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.038	.099	0.321
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.303	.212	1.460
BS1E1	Interaction of San Antonio-Black homes vs others	.050	-.133	1.106
BS1E2	Interaction of San Antonio-White homes vs others	.099	-.107	0.561
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.048	.043	0.115
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.004	.148	1.380
BS2E1	Interaction of Philadelphia-Black homes vs others	-.054	.058	0.166
BST1E1	Interaction of Regulated-Black homes vs others	-.100	.086	0.303
BST1E2	Interaction of Regulated-White homes vs others	.017	.261	1.734
BST2E1	Interaction of Unregulated-Black homes vs others	.065	-.223	2.438
BST2E2	Interaction of Unregulated-White homes vs others	-.001	-.196	1.301

Total R^2 = 0.222

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN PHYSICAL NEEDS ALONE"

(n = 243)

Dependent Variable: C1V18

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.029	.122	0.659
BINSITE1	Binary on San Antonio vs others	.039	.115	0.335
BINSITE2	Binary on Philadelphia vs others	-.046	.082	0.204
BINSTAT1	Binary on Regulated vs others	-.060	-.153	0.541
BINSTAT2	Binary on Unregulated vs others	.129	.117	0.365
BINETH1	Binary on Black homes vs others	.138	-.237	0.932
BINETH2	Binary on White homes vs others	-.146	-.143	0.368
NCT012C	Number of children less than 12 months	-.030	.001	0.000
NC1235C	Number of children 12-35 months	-.047	-.012	0.024
NC3659C	Number of children 36-59 months	.051	.119	2.314
NC59PLC	Number of children 60+ months	.029	.059	0.368
MACGAGE	Caregiver age in years	.094	.177	3.283
MACGEXP	Caregiver experience in years	-.063	-.046	0.306
MACGEDUC	Caregiver education in years	-.046	.023	0.079
CGCHILD	Caregiver's child is present	.091	.181	4.637*
CGREL	Caregiver's relative is present	.165	.101	1.933
STDAGEC	Standard deviation of child ages (in months) excluding infants	.067	.211	3.729
AVGAGEC	Average age of children (in months) excluding infants	-.008	-.249	3.379
RATEFEMC	Ratio of female children in home	.029	-.016	0.054
RBLACK	Ratio of Black children in home	.156	.321	2.177
RWHITE	Ratio of White children in home	-.128	.189	1.132
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.053	.026	0.020
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.102	-.051	0.078
BS1E1	Interaction of San Antonio-Black homes vs others	.173	.022	0.029
BS1E2	Interaction of San Antonio-White homes vs others	-.120	-.232	2.441
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.050	-.166	1.541
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.011	-.194	2.194
BS2E1	Interaction of Philadelphia-Black homes vs others	.012	.064	0.185
BST1E1	Interaction of Regulated-Black homes vs others	.050	.179	1.227
BST1E2	Interaction of Regulated-White homes vs others	-.087	.248	1.447
BST2E1	Interaction of Unregulated-Black homes vs others	.171	.109	0.542
BST2E2	Interaction of Unregulated-White homes vs others	-.032	.104	0.338

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.157$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN PHYSICAL NEEDS WHILE INTERACTING WITH CAREGIVER"

(n = 243)

Dependent Variable: C1V19

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.196	.094	0.402
BINSITE1	Binary on San Antonio vs others	.192	.373	3.667
BINSITE2	Binary on Philadelphia vs others	-.130	.068	0.145
BINSTAT1	Binary on Regulated vs others	-.093	.033	0.026
BINSTAT2	Binary on Unregulated vs others	.108	-.036	0.037
BINETH1	Binary on Black homes vs others	-.050	-.337	1.952
BINETH2	Binary on White homes vs others	-.100	-.052	0.051
NCTO12C	Number of children less than 12 months	-.104	-.056	0.691
NC1235C	Number of children 12-35 months	-.229	-.171	5.273*
NC3659C	Number of children 36-59 months	-.192	-.109	2.021
NC59PLC	Number of children 60+ months	-.009	.068	0.503
MACGAGE	Caregiver age in years	.127	.043	0.205
MACGEXP	Caregiver experience in years	.043	.062	0.582
MACGEDUC	Caregiver education in years	-.132	.029	0.131
CGCHILD	Caregiver's child is present	-.067	.036	0.185
CGREL	Caregiver's relative is present	.119	.056	0.612
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.025	.201	3.484
AVGAGEC	Average age of children (in months) excluding infants	-.087	-.295	4.918*
RATEFEMC	Ratio of female children in home	.063	.030	0.204
RBLACK	Ratio of Black children in home	-.048	.180	0.707
RWHITE	Ratio of White children in home	-.083	.049	0.078
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.006	-.255	2.014
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.147	-.150	0.702
BS1E1	Interaction of San Antonio-Black homes vs others	.142	.065	0.252
BS1E2	Interaction of San Antonio-White homes vs others	-.022	-.057	0.156
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.124	-.126	0.933
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.016	.002	0.000
BS2E1	Interaction of Philadelphia-Black homes vs others	-.086	.053	0.132
BST1E1	Interaction of Regulated-Black homes vs others	-.112	.056	0.126
BST1E2	Interaction of Regulated-White homes vs others	-.047	.056	0.077
BST2E1	Interaction of Unregulated-Black homes vs others	.153	.121	0.687
BST2E2	Interaction of Unregulated-White homes vs others	-.068	.003	0.000

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.187

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN CONVERSATION WITH YOUNG CHILD"

(n = 243)

Dependent Variable: C1V20

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.063	.055	0.135
BINSITE1	Binary on San Antonio vs others	.080	-.008	0.002
BINSITE2	Binary on Philadelphia vs others	.041	-.048	0.069
BINSTAT1	Binary on Regulated vs others	.046	.082	0.156
BINSTAT2	Binary on Unregulated vs others	.027	.159	0.683
BINETH1	Binary on Black homes vs others	.009	-.089	0.134
BINETH2	Binary on White homes vs others	.069	.107	0.209
NCT012C	Number of children less than 12 months	.120	.097	1.990
NC1235C	Number of children 12-35 months	.010	.055	0.530
NC3659C	Number of children 36-59 months	.069	-.024	0.096
NC59PLC	Number of children 60+ months	.055	-.013	0.017
MACGAGE	Caregiver age in years	-.069	-.041	0.179
MACGEXP	Caregiver experience in years	.022	-.022	0.069
MACGEDUC	Caregiver education in years	-.024	-.094	1.323
CGCHILD	Caregiver's child is present	.075	.047	0.313
CGREL	Caregiver's relative is present	-.089	-.051	0.495
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.008	-.317	8.477*
AVGAGEC	Average age of children (in months) excluding infants	.114	.409	9.173*
RATEFEMC	Ratio of female children in home	.020	.019	0.075
RBLACK	Ratio of Black children in home	.015	.139	0.413
RWHITE	Ratio of White children in home	.075	.098	0.306
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.035	-.081	0.197
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.090	-.060	0.110
BS1E1	Interaction of San Antonio-Black homes vs others	-.010	.161	1.509
BS1E2	Interaction of San Antonio-White homes vs others	.181	.278	3.554
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.095	.101	0.573
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.072	-.075	0.328
BS2E1	Interaction of Philadelphia-Black homes vs others	.084	.162	1.188
BST1E1	Interaction of Regulated-Black homes vs others	.111	.050	0.097
BST1E2	Interaction of Regulated-White homes vs others	.008	-.192	0.871
BST2E1	Interaction of Unregulated-Black homes vs others	-.084	-.109	0.547
BST2E2	Interaction of Unregulated-White homes vs others	.099	-.089	0.251

*These F ratios are significant at $p < .05$.

For p = < .05, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.163$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ENGAGES IN CONVERSATION WITH CAREGIVER"

(n = 243)

Dependent Variable: C1V21

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.010	.037	0.064
BINSITE1	Binary on San Antonio vs others	.042	-.009	0.002
BINSITE2	Binary on Philadelphia vs others	.016	.588	11.118*
BINSTAT1	Binary on Regulated vs others	-.100	-.139	0.476
BINSTAT2	Binary on Unregulated vs others	.016	-.146	0.615
BINETH1	Binary on Black homes vs others	-.063	.156	0.433
BINETH2	Binary on White homes vs others	.108	.097	0.181
NCT012C	Number of children less than 12 months	-.096	-.053	0.643
NC1235C	Number of children 12-35 months	-.130	-.032	0.195
NC3659C	Number of children 36-59 months	-.136	-.125	2.768
NC59PLC	Number of children 60+ months	.016	.014	0.024
MACGAGE	Caregiver age in years	.074	.038	0.159
MACGEXP	Caregiver experience in years	.039	-.006	0.006
MACGEDUC	Caregiver education in years	.007	.043	0.297
CGCHILD	Caregiver's child is present	-.078	-.039	0.229
CGREL	Caregiver's relative is present	-.016	.019	0.076
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.044	-.108	1.041
AVGAGEC	Average age of children (in months) excluding infants	.026	.154	1.377
RATEFEMC	Ratio of female children in home	.184	.183	7.613*
RBLACK	Ratio of Black children in home	-.118	-.501	5.695*
RWHITE	Ratio of White children in home	.113	-.021	0.014
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.003	.025	0.020
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.043	-.068	0.150
BS1E1	Interaction of San Antonio-Black homes vs others	.044	-.027	0.044
BS1E2	Interaction of San Antonio-White homes vs others	.091	.200	1.965
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.076	-.296	5.290*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.053	-.326	6.643*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.063	-.222	2.373
BST1E1	Interaction of Regulated-Black homes vs others	-.069	.316	4.078*
BST1E2	Interaction of Regulated-White homes vs others	-.017	-.097	0.237
BST2E1	Interaction of Unregulated-Black homes vs others	.035	.382	7.127*
BST2E2	Interaction of Unregulated-White homes vs others	.032	.030	0.031

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.215$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ANTISOCIAL TO YOUNG CHILD"

(n = 243)

Dependent Variable: C1V22

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.024	-.119	0.618
BINSITE1	Binary on San Antonio vs others	.035	.100	0.252
BINSITE2	Binary on Philadelphia vs others	.107	.063	0.117
BINSTAT1	Binary on Regulated vs others	.020	-.121	0.335
BINSTAT2	Binary on Unregulated vs others	.012	.080	0.171
BINETH1	Binary on Black homes vs others	-.024	.254	1.061
BINETH2	Binary on White homes vs others	.050	.069	0.086
NCT012C	Number of children less than 12 months	.014	-.005	0.004
NC1235C	Number of children 12-35 months	.050	.040	0.278
NC3659C	Number of children 36-59 months	.078	.068	0.756
NC59PLC	Number of children 60+ months	-.062	-.003	0.001
MACGAGE	Caregiver age in years	.034	-.068	0.482
MACGEXP	Caregiver experience in years	.155	.223	7.104*
MACGEDUC	Caregiver education in years	-.049	-.129	2.452
CGCHILD	Caregiver's child is present	.006	.079	0.873
CGREL	Caregiver's relative is present	.027	-.028	0.150
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.066	-.115	1.097
AVGAGEC	Average age of children (in months) excluding infants	-.027	.007	0.002
RATEFEMC	Ratio of female children in home	-.059	-.039	0.315
RBLACK	Ratio of Black children in home	-.065	-.281	1.648
RWHITE	Ratio of White children in home	.055	-.088	0.242
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.001	.075	0.168
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.002	-.050	0.074
BS1E1	Interaction of San Antonio-Black homes vs others	.085	.127	0.925
BS1E2	Interaction of San Antonio-White homes vs others	-.046	-.163	1.205
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.170	.274	4.175*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.028	.036	0.074
BS2E1	Interaction of Philadelphia-Black homes vs others	-.023	-.142	0.892
BST1E1	Interaction of Regulated-Black homes vs others	.003	-.072	0.198
BST1E2	Interaction of Regulated-White homes vs others	.043	.004	0.000
BST2E1	Interaction of Unregulated-Black homes vs others	-.024	-.094	0.396
BST2E2	Interaction of Unregulated-White homes vs others	.023	-.005	0.001

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0. 149

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 CONTROLS A YOUNG CHILD"

(n = 243)

Dependent Variable: C1V23

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.080	.023	0.024
BINSITE1	Binary on San Antonio vs others	-.010	.102	0.273
BINSITE2	Binary on Philadelphia vs others	.157	.248	1.893
BINSTAT1	Binary on Regulated vs others	-.041	.045	0.047
BINSTAT2	Binary on Unregulated vs others	.038	.009	0.002
BINETH1	Binary on Black homes vs others	-.062	-.213	0.776
BINETH2	Binary on White homes vs others	.139	-.129	0.308
NCT012C	Number of children less than 12 months	.216	.179	6.978*
NC1235C	Number of children 12-35 months	.256	.229	9.356*
NC3659C	Number of children 36-59 months	.029	-.063	0.664
NC59PLC	Number of children 60+ months	-.083	-.101	1.105
MACCAGE	Caregiver age in years	-.052	-.006	0.004
MACGEXP	Caregiver experience in years	.009	-.013	0.027
MACGEDUC	Caregiver education in years	.104	.023	0.082
CGCHILD	Caregiver's child is present	-.011	-.045	0.296
CGREL	Caregiver's relative is present	-.049	-.022	0.097
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.059	-.059	0.301
AVGAGEG	Average age of children (in months) excluding infants	-.049	.152	1.283
RATEFEMC	Ratio of female children in home	-.005	.013	0.039
RBLACK	Ratio of Black children in home	-.034	.161	0.561
RWHITE	Ratio of White children in home	.122	-.010	0.003
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.031	-.240	1.771
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.009	-.096	0.286
BS1E1	Interaction of San Antonio-Black homes vs others	-.037	.144	1.235
BS1E2	Interaction of San Antonio-White homes vs others	.091	.196	1.794
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.062	-.026	0.039
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.157	.045	0.119
BS2E1	Interaction of Philadelphia-Black homes vs others	.023	-.105	0.504
BST1E1	Interaction of Regulated-Black homes vs others	-.056	-.091	0.327
BST1E2	Interaction of Regulated-White homes vs others	.040	.054	0.072
BST2E1	Interaction of Unregulated-Black homes vs others	-.062	-.079	0.288
BST2E2	Interaction of Unregulated-White homes vs others	.164	.093	0.278

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.178$

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 CONTROLLED BY CAREGIVER"
(n = 243)

Dependent Variable: **C1V24**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.001	.183	1.860
BINSITE1	Binary on San Antonio vs others	-.036	.080	0.205
BINSITE2	Binary on Philadelphia vs others	.325	.495	9.164*
BINSTAT1	Binary on Regulated vs others	-.051	.537	8.315*
BINSTAT2	Binary on Unregulated vs others	.040	.165	0.914
BINETH1	Binary on Black homes vs others	.245	.509	5.410*
BINETH2	Binary on White homes vs others	-.153	.408	3.761
NCT012C	Number of children less than 12 months	-.078	-.056	0.838
NC1235C	Number of children 12-35 months	-.135	-.077	1.295
NC3659C	Number of children 36-59 months	-.100	-.036	0.270
NC59PLC	Number of children 60+ months	.139	.168	3.740
MACGAGE	Caregiver age in years	.071	.005	0.004
MACGEXP	Caregiver experience in years	.014	-.013	0.032
MACGEDUC	Caregiver education in years	-.237	-.216	8.783*
CGCHILD	Caregiver's child is present	-.004	.045	0.357
CGREL	Caregiver's relative is present	.045	.035	0.293
STDAGEC	Standard deviation of child ages (in months) excluding infants	.020	-.009	0.008
AVGAGEC	Average age of children (in months) excluding infants	.033	-.049	0.167
RATEFEMC	Ratio of female children in home	.071	.027	0.191
RBLACK	Ratio of Black children in home	.202	-.213	1.198
RWHITE	Ratio of White children in home	-.158	-.014	0.008
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.075	-.205	1.375
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.039	-.026	0.025
BS1E1	Interaction of San Antonio-Black homes vs others	.096	.154	1.730
BS1E2	Interaction of San Antonio-White homes vs others	-.077	.137	1.074
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.089	-.200	2.834
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.109	-.083	0.500
BS2E1	Interaction of Philadelphia-Black homes vs others	.343	.130	0.930
BST1E1	Interaction of Regulated-Black homes vs others	.005	-.322	4.932*
BST1E2	Interaction of Regulated-White homes vs others	-.079	-.404	4.821*
BST2E1	Interaction of Unregulated-Black homes vs others	.187	-.062	0.218
BST2E2	Interaction of Unregulated-White homes vs others	-.105	-.196	1.514

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.32$[illegible]

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 MONITORING - TOTAL"
(n = 243)

Dependent Variable: C1V25

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.095	.044	0.150
BINSITE1	Binary on San Antonio vs others	-.378	-.896	35.033*
BINSITE2	Binary on Philadelphia vs others	-.231	-.344	6.082*
BINSTAT1	Binary on Regulated vs others	-.026	-.364	5.220*
BINSTAT2	Binary on Unregulated vs others	-.149	-.101	0.474
BINETH1	Binary on Black homes vs others	-.039	-.300	2.561
BINETH2	Binary on White homes vs others	.071	-.465	6.569*
NCT012C	Number of children less than 12 months	.069	.105	4.027*
NC1235C	Number of children 12-35 months	.108	.053	0.855
NC3659C	Number of children 36-59 months	.078	.094	2.501
NC59PLC	Number of children 60+ months	.129	.145	3.840
MACGAGE	Caregiver age in years	-.042	.010	0.017
MACGEXP	Caregiver experience in years	-.121	-.080	1.574
MACGEDUC	Caregiver education in years	.104	.037	0.351
CGCHILD	Caregiver's child is present	.013	-.074	1.322
CGREL	Caregiver's relative is present	-.037	-.019	0.115
STDAGEC	Standard deviation of child ages (in months) excluding infants	.107	.091	1.181
AVGAGEC	Average age of children (in months) excluding infants	.042	-.133	2.229
RATEFEMC	Ratio of female children in home	-.042	-.086	2.673
RBLACK	Ratio of Black children in home	.007	.300	3.260
RWHITE	Ratio of White children in home	.027	.112	0.685
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.141	.183	1.725
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.268	.003	0.000
BS1E1	Interaction of San Antonio-Black homes vs others	-.124	.142	2.005
BS1E2	Interaction of San Antonio-White homes vs others	-.075	.239	4.474*
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.146	-.029	0.082
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.125	-.108	1.172
BS2E1	Interaction of Philadelphia-Black homes vs others	-.201	-.218	3.669
BST1E1	Interaction of Regulated-Black homes vs others	.030	.126	1.044
BST1E2	Interaction of Regulated-White homes vs others	-.029	.311	3.897*
BST2E1	Interaction of Unregulated-Black homes vs others	-.175	-.043	0.141
BST2E2	Interaction of Unregulated-White homes vs others	.036	.219	2.579

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.509

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 ALONE - TOTAL"

(n = 245)

Dependent Variable: C1V26

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.038	.231	2.608
BINSITE1	Binary on San Antonio vs others	-.035	-.148	0.615
BINSITE2	Binary on Philadelphia vs others	-.098	-.003	0.000
BINSTAT1	Binary on Regulated vs others	.055	-.088	0.198
BINSTAT2	Binary on Unregulated vs others	-.042	.107	0.337
BINETH1	Binary on Black homes vs others	.054	.007	0.001
BINETH2	Binary on White homes vs others	-.028	-.004	0.000
NCT012C	Number of children less than 12 months	.055	.028	0.188
NC1235C	Number of children 12-35 months	.112	.049	0.454
NC3659C	Number of children 36-59 months	.215	.278	13.986*
NC59PLC	Number of children 60+ months	.033	.052	0.315
MACGAGE	Caregiver age in years	-.044	.023	0.064
MACGEXP	Caregiver experience in years	-.092	-.089	1.263
MACGEDUC	Caregiver education in years	-.001	-.020	0.065
CGCHILD	Caregiver's child is present	.091	.040	0.243
CGREL	Caregiver's relative is present	.037	.044	0.394
STDAGEC	Standard deviation of child ages (in months) excluding infants	.051	.245	5.521*
AVGAGEC	Average age of children (in months) excluding infants	-.069	-.394	9.269*
RATEFEMC	Ratio of female children in home	.048	.018	0.079
RBLACK	Ratio of Black children in home	.088	.290	1.962
RWHITE	Ratio of White children in home	-.075	.016	0.009
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.110	.171	0.969
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.144	-.061	0.122
BS1E1	Interaction of San Antonio-Black homes vs others	.015	.001	0.000
BS1E2	Interaction of San Antonio-White homes vs others	.000	-.123	0.757
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.165	-.273	4.626*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.019	-.115	0.844
BS2E1	Interaction of Philadelphia-Black homes vs others	-.037	.001	0.000
BST1E1	Interaction of Regulated-Black homes vs others	.013	.054	0.123
BST1E2	Interaction of Regulated-White homes vs others	.053	.304	2.390
BST2E1	Interaction of Unregulated-Black homes vs others	-.023	-.045	0.102
BST2E2	Interaction of Unregulated-White homes vs others	-.009	.178	1.096

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.235

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 WITH OTHER YOUNG CHILD - TOTAL"

(n = 243)

Dependent Variable: C1V27

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.060	-.172	1.431
BINSITE1	Binary on San Antonio vs others	-.021	.024	0.016
BINSITE2	Binary on Philadelphia vs others	.020	-.172	0.974
BINSTAT1	Binary on Regulated vs others	-.018	-.309	2.405
BINSTAT2	Binary on Unregulated vs others	-.056	-.223	1.465
BINETH1	Binary on Black homes vs others	-.089	-.047	0.040
BINETH2	Binary on White homes vs others	.112	-.042	0.035
NCT012C	Number of children less than 12 months	.255	.245	13.926*
NC1235C	Number of children 12-35 months	.186	.175	5.861*
NC3659C	Number of children 36-59 months	.149	-.004	0.002
NC59PLC	Number of children 60+ months	-.021	-.161	3.009
MACGAGE	Caregiver age in years	-.037	-.091	0.947
MACGEXP	Caregiver experience in years	.107	.136	2.924
MACGEDUC	Caregiver education in years	.078	-.036	0.215
CGCHILD	Caregiver's child is present	.014	-.004	0.002
CGREL	Caregiver's relative is present	-.029	.004	0.004
STDAGEC	Standard deviation of child ages (in months) excluding infants	.014	-.226	4.681*
AVGAGEC	Average age of children (in months) excluding infants	.119	.444	11.756*
RATEFEMC	Ratio of female children in home	.004	.078	1.410
RBLACK	Ratio of Black children in home	-.087	-.073	0.123
RWHITE	Ratio of White children in home	.095	-.176	1.072
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.007	.022	0.016
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.071	-.018	0.010
BS1E1	Interaction of San Antonio-Black homes vs others	-.033	.025	0.040
BS1E2	Interaction of San Antonio-White homes vs others	.023	-.045	0.102
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.073	.290	5.190*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.042	.123	0.969
BS2E1	Interaction of Philadelphia-Black homes vs others	-.082	-.126	0.778
BST1E1	Interaction of Regulated-Black homes vs others	-.024	-.018	0.013
BST1E2	Interaction of Regulated-White homes vs others	.028	.075	0.144
BST2E1	Interaction of Unregulated-Black homes vs others	-.125	-.016	0.013
BST2E2	Interaction of Unregulated-White homes vs others	.101	.141	0.680

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.231

Residual Degrees of Freedom = 210

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 1 WITH CAREGIVER - TOTAL"

(n = 243)

Dependent Variable: C1V28

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.078	.023	0.031
BINSITE1	Binary on San Antonio vs others	.120	.450	6.498*
BINSITE2	Binary on Philadelphia vs others	.097	.591	13.219*
BINSTAT1	Binary on Regulated vs others	-.165	.215	1.338
BINSTAT2	Binary on Unregulated vs others	.075	-.058	0.113
BINETH1	Binary on Black homes vs others	.061	.104	0.227
BINETH2	Binary on White homes vs others	-.079	.142	0.459
NCT012C	Number of children less than 12 months	-.200	-.146	5.698*
NC1235C	Number of children 12-35 months	-.286	-.234	11.051*
NC3659C	Number of children 36-59 months	-.227	-.096	1.906
NC59PLC	Number of children 60+ months	.149	.343	15.717*
MACGAGE	Caregiver age in years	.044	-.077	0.788
MACGEXP	Caregiver experience in years	.045	.080	1.158
MACGEDUC	Caregiver education in years	-.141	-.037	0.261
CGCHILD	Caregiver's child is present	-.055	-.024	0.101
CGREL	Caregiver's relative is present	-.008	.000	0.000
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.072	-.009	0.009
AVGAGEC	Average age of children (in months) excluding infants	-.025	-.263	4.738*
RATEFEMC	Ratio of female children in home	.110	.069	1.269
RBLACK	Ratio of Black children in home	.013	-.189	0.955
RWHITE	Ratio of White children in home	-.036	.023	0.022
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.055	-.316	3.769
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.144	-.116	0.510
BS1E1	Interaction of San Antonio-Black homes vs others	.083	-.031	0.069
BS1E2	Interaction of San Antonio-White homes vs others	-.005	.078	0.350
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.113	-.349	8.638*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.030	-.156	1.795
BS2E1	Interaction of Philadelphia-Black homes vs others	.098	-.076	0.328
BST1E1	Interaction of Regulated-Black homes vs others	-.119	.012	0.007
BST1E2	Interaction of Regulated-White homes vs others	-.120	-.275	2.247
BST2E1	Interaction of Unregulated-Black homes vs others	.148	.148	1.254
BST2E2	Interaction of Unregulated-White homes vs others	-.042	-.096	0.368

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.333$

Residual Degrees of Freedom = 210

CHILD 2 REGRESSIONS

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE,
"CHILD 2 ENGAGES IN PROSOCIAL ACTIVITY"
(n = 155)

Dependent Variable: C2V01

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.094	.070	0.143
BINSITE1	Binary on San Antonio vs others	-.066	.286	1.180
BINSITE2	Binary on Philadelphia vs others	.004	.139	0.391
BINSTAT1	Binary on Regulated vs others	.002	-.157	0.363
BINSTAT2	Binary on Unregulated vs others	.025	.203	0.579
BINETH1	Binary on Black homes vs others	.034	.186	0.384
BINETH2	Binary on White homes vs others	.073	.012	0.001
NCT012C	Number of children less than 12 months	-.054	-.050	0.300
NC1235C	Number of children 12-35 months	.120	.023	0.032
NC3659C	Number of children 36-59 months	.044	-.019	0.035
NC59PLC	Number of children 60+ months	.023	.020	0.024
MACGAGE	Caregiver age in years	-.056	-.017	0.014
MACGEXP	Caregiver experience in years	-.013	.088	0.556
MACGEDUC	Caregiver education in years	.084	.013	0.014
CGCHILD	Caregiver's child is present	.107	.148	1.260
CGREL	Caregiver's relative is present	.156	.247	6.652*
STDAGEC	Standard deviation of child ages (in months) excluding infants	.118	.167	2.193
AVGAGEC	Average age of children (in months) excluding infants	-.062	-.117	0.650
RATEFEMC	Ratio of female children in home	.064	.006	0.004
RBLACK	Ratio of Black children in home	.013	.129	0.218
RWHITE	Ratio of White children in home	.087	.276	1.470
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.004	-.049	0.047
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.085	-.393	2.649
BS1E1	Interaction of San Antonio-Black homes vs others	.028	-.128	0.547
BS1E2	Interaction of San Antonio-White homes vs others	-.048	-.205	1.050
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.025	-.046	0.088
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.057	-.444	5.406*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.010	-.042	0.048
BST1E1	Interaction of Regulated-Black homes vs others	.060	.141	0.521
BST1E2	Interaction of Regulated-White homes vs others	-.000	.184	0.452
BST2E1	Interaction of Unregulated-Black homes vs others	-.061	.100	0.270
BST2E2	Interaction of Unregulated-White homes vs others	.116	.272	1.118

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.198$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN AFFECTIONATE BEHAVIOR"

(n = 155)

Dependent Variable: **C2V02**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.035	.050	0.078
BINSITE1	Binary on San Antonio vs others	-.038	.040	0.025
BINSITE2	Binary on Philadelphia vs others	.141	.268	1.571
BINSTAT1	Binary on Regulated vs others	-.103	.098	0.153
BINSTAT2	Binary on Unregulated vs others	.068	.363	1.998
BINETH1	Binary on Black homes vs others	.000	-.360	1.544
BINETH2	Binary on White homes vs others	-.029	.099	0.087
NCT012C	Number of children less than 12 months	-.063	-.076	0.734
NC1235C	Number of children 12-35 months	-.132	-.154	1.583
NC3659C	Number of children 36-59 months	-.102	-.085	0.725
NC59PLC	Number of children 60+ months	-.070	-.046	0.135
MACGAGE	Caregiver age in years	.027	.044	0.100
MACGEXP	Caregiver experience in years	.006	.002	0.000
MACGEDUC	Caregiver education in years	-.156	-.077	0.501
CGCHILD	Caregiver's child is present	.022	.009	0.005
CGREL	Caregiver's relative is present	-.015	.053	0.324
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.089	.007	0.004
AVGAGEC	Average age of children (in months) excluding infants	-.040	.006	0.002
RATEFEMC	Ratio of female children in home	.071	.044	0.250
RBLACK	Ratio of Black children in home	.088	.714	7.197*
RWHITE	Ratio of White children in home	-.069	-.079	0.130
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.000	.197	0.812
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.004	-.001	0.000
BS1E1	Interaction of San Antonio-Black homes vs others	-.097	.091	0.301
BS1E2	Interaction of San Antonio-White homes vs others	-.000	-.079	0.169
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.063	-.146	0.967
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.053	-.001	0.000
BS2E1	Interaction of Philadelphia-Black homes vs others	.152	.143	0.604
BST1E1	Interaction of Regulated-Black homes vs others	-.081	-.272	2.072
BST1E2	Interaction of Regulated-White homes vs others	-.050	.056	0.046
BST2E1	Interaction of Unregulated-Black homes vs others	-.089	-.551	8.813*
BST2E2	Interaction of Unregulated-White homes vs others	.056	-.079	0.101

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.255$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 IN DISTRESS"

(n = 155)

Dependent Variable: C2V03

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.143	.152	0.643
BINSITE1	Binary on San Antonio vs others	-.044	-.191	0.508
BINSITE2	Binary on Philadelphia vs others	-.055	-.047	0.044
BINSTAT1	Binary on Regulated vs others	-.057	.043	0.026
BINSTAT2	Binary on Unregulated vs others	.117	.782	8.269*
BINETH1	Binary on Black homes vs others	-.025	-.137	0.201
BINETH2	Binary on White homes vs others	-.071	-.089	0.063
NCT012C	Number of children less than 12 months	-.071	-.061	0.419
NC1235C	Number of children 12-35 months	.002	.027	0.044
NC3659C	Number of children 36-59 months	-.014	.038	0.130
NC59PLC	**Number of children 60+ months**	-.024	.038	0.083
MACGAGE	Caregiver age in years	-.037	-.095	0.420
MACGEXP	Caregiver experience in years	-.080	-.002	0.000
MACGEDUC	Caregiver education in years	-.143	-.085	0.541
CGCHILD	**Caregiver's child is present**	.028	-.037	0.075
CGREL	**Caregiver's relative is present**	.034	.019	0.039
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.002	-.053	0.214
AVGAGEC	Average age of children (in months) excluding infants	-.066	-.060	0.165
RATEFEMC	Ratio of female children in home	.053	-.012	0.016
RBLACK	Ratio of Black children in home	-.023	.224	0.628
RWHITE	Ratio of White children in home	-.067	.172	0.549
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.047	-.150	0.422
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.012	-.407	2.719
BS1E1	Interaction of San Antonio-Black homes vs others	.015	.251	2.019
BS1E2	Interaction of San Antonio-White homes vs others	-.028	.389	3.618
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.018	.092	0.341
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.034	-.138	0.501
BS2E1	Interaction of Philadelphia-Black homes vs others	-.019	-.023	0.014
BST1E1	Interaction of Regulated-Black homes vs others	.050	.017	0.007
BST1E2	Interaction of Regulated-White homes vs others	-.074	-.120	0.186
BST2E1	Interaction of Unregulated-Black homes vs others	-.057	-.292	2.201
BST2E2	Interaction of Unregulated-White homes vs others	.028	-.416	2.516

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.163$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 SEEKS ATTENTION OF CAREGIVER"

(n = 155)

Dependent Variable: C2V04

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.061	-.271	2.440
BINSITE1	Binary on San Antonio vs others	.266	.312	1.623
BINSITE2	Binary on Philadelphia vs others	-.032	.376	3.295
BINSTAT1	Binary on Regulated vs others	.030	-.075	0.095
BINSTAT2	Binary on Unregulated vs others	-.065	-.441	3.152
BINETH1	Binary on Black homes vs others	-.097	-.256	0.835
BINETH2	Binary on White homes vs others	.062	-.378	1.357
NCT012C	Number of children less than 12 months	-.078	-.157	3.343
NC1235C	Number of children 12-35 months	.030	.079	0.446
NC3659C	Number of children 36-59 months	.021	-.031	0.104
NC59PLC	Number of children 60+ months	-.155	-.101	0.704
MACGAGE	Caregiver age in years	-.087	-.100	0.553
MACGEXP	Caregiver experience in years	-.032	.018	0.027
MACGEDUC	Caregiver education in years	.047	.112	1.124
CGCHILD	Caregiver's child is present	.067	.035	0.082
CGREL	Caregiver's relative is present	-.145	-.110	1.501
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.162	-.168	2.563
AVGAGEC	Average age of children (in months) excluding infants	-.031	.144	1.141
RATEFEMC	Ratio of female children in home	-.063	.024	0.077
RBLACK	Ratio of Black children in home	-.155	-.450	3,056
RWHITE	Ratio of White children in home	.016	-.563	7.052*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.133	-.096	0.207
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.067	-.027	0.014
BS1E1	Interaction of San Antonio-Black homes vs others	.136	.143	0.785
BS1E2	Interaction of San Antonio-White homes vs others	.152	.139	0.553
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.014	-.044	0.094
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.057	-.019	0.011
BS2E1	Interaction of Philadelphia-Black homes vs others	-.155	-.197	1.221
BST1E1	Interaction of Regulated-Black homes vs others	-.046	.128	0.489
BST1E2	Interaction of Regulated-White homes vs others	.043	.260	1.044
BST2E1	Interaction of Unregulated-Black homes vs others	-.091	.207	1.326
BST2E2	Interaction of Unregulated-White homes vs others	.074	.143	3.424

*These F ratios are significant at $\rho < .050$.

For $\rho = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.302$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN DRAMATIC PLAY"

(n = 155)

Dependent Variable: C2V05

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.145	-.032	0.031
BINSITE1	Binary on San Antonio vs others	-.067	.106	0.168
BINSITE2	Binary on Philadelphia vs others	.188	.384	3.116
BINSTAT1	Binary on Regulated vs others	.107	.418	2.693
BINSTAT2	Binary on Unregulated vs others	-.015	.166	0.403
BINETH1	Binary on Black homes vs others	-.192	.126	0.183
BINETH2	Binary on White homes vs others	.309	.036	0.806
NCT012C	Number of children less than 12 months	.127	.077	0.722
NC1235C	Number of children 12-35 months	-.013	-.107	0.740
NC3659C	Number of children 36-59 months	.055	.026	0.066
NC59PLC	**Number of children 60+ months**	-.045	.051	0.165
MACGAGE	Caregiver age in years	-.040	-.067	0.222
MACGEXP	Caregiver experience in years	.050	-.052	0.200
MACGEDUC	Caregiver education in years	.077	-.015	0.019
CGCHILD	**Caregiver's child is present**	-.062	-.207	2.587
CGREL	**Caregiver's relative is present**	.095	.185	3.936*
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.099	.020	0.032
AVGAGEC	Average age of children (in months) excluding infants	-.038	-.060	0.181
RATEFEMC	Ratio of female children in home	.030	.054	0.358
RBLACK	Ratio of Black children in home	-.182	-.059	0.047
RWHITE	Ratio of White children in home	.308	-.018	0.007
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.073	-.030	0.019
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.083	-.083	0.124
BS1E1	Interaction of San Antonio-Black homes vs others	-.084	-.018	0.012
BS1E2	Interaction of San Antonio-White homes vs others	.056	-.022	0.012
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.069	-.094	0.387
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.123	.011	0.004
BS2E1	Interaction of Philadelphia-Black homes vs others	-.095	-.157	0.699
BST1E1	Interaction of Regulated-Black homes vs others	-.080	-.223	1.352
BST1E2	Interaction of Regulated-White homes vs others	.173	-.195	0.529
BST2E1	Interaction of Unregulated-Black homes vs others	-.074	-.098	0.267
BST2E2	Interaction of Unregulated-White homes vs others	.094	-.070	0.077

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.230

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN LOOKING AT A BOOK"
(n = 155)

Dependent Variable: C2V06

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.117	-.079	0.194
BINSITE1	Binary on San Antonio vs others	.021	-.261	1.052
BINSITE2	Binary on Philadelphia vs others	-.059	-.395	3.368
BINSTAT1	Binary on Regulated vs others	-.069	-.096	0.145
BINSTAT2	Binary on Unregulated vs others	.035	-.218	0.714
BINETH1	Binary on Black homes vs others	-.056	.161	0.307
BINETH2	Binary on White homes vs others	.173	.676	4.010*
NCT012C	Number of children less than 12 months	-.006	.009	0.010
NC1235C	Number of children 12-35 months	-.140	.050	0.163
NC3659C	Number of children 36-59 months	-.097	-.136	1.839
NC59PLC	Number of children 60+ months	-.061	.027	0.047
MACGAGE	Caregiver age in years	-.141	-.103	0.542
MACGEXP	Caregiver experience in years	-.091	.084	0.545
MACGEDUC	Caregiver education in years	.023	-.198	3.253
CGCHILD	Caregiver's child is present	.101	.207	2.634
CGREL	Caregiver's relative is present	-.105	-.131	2.000
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.199	-.238	4.772*
AVGAGEC	Average age of children (in months) excluding infants	-.005	-.061	0.190
RATEFEMC	Ratio of female children in home	-.038	.020	0.051
RBLACK	Ratio of Black children in home	-.065	-.121	0.204
RWHITE	Ratio of White children in home	.147	-.033	0.023
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.058	.086	0.152
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.144	.378	2.612
BS1E1	Interaction of San Antonio-Black homes vs others	.098	.153	0.829
BS1E2	Interaction of San Antonio-White homes vs others	.063	-.061	0.100
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.068	.107	0.308
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.107	.142	0.393
BS2E1	Interaction of Philadelphia-Black homes vs others	-.121	.029	0.024
BST1E1	Interaction of Regulated-Black homes vs others	.004	.135	0.509
BST1E2	Interaction of Regulated-White homes vs others	-.035	-.355	1.802
BST2E1	Interaction of Unregulated-Black homes vs others	-.000	.078	0.173
BST2E2	Interaction of Unregulated-White homes vs others	.078	-.331	1.774

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.247

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN LANGUAGE/INFORMATION WITH CAREGIVER"

(n = 155)

Dependent Variable: C2V07

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.105	-.192	1.201
BINSITE1	Binary on San Antonio vs others	-.123	.323	1.698
BINSITE2	Binary on Philadelphia vs others	.286	.064	0.093
BINSTAT1	Binary on Regulated vs others	-.070	-.004	0.000
BINSTAT2	Binary on Unregulated vs others	-.154	.202	0.644
BINETH1	Binary on Black homes vs others	.115	.092	0.106
BINETH2	Binary on White homes vs others	-.006	.480	2.139
NCT012C	Number of children less than 12 months	-.055	.007	0.006
NC1235C	Number of children 12-35 months	-.104	-.030	0.064
NC3659C	Number of children 36-59 months	-.029	-.036	0.139
NC59PLC	Number of children 60+ months	.021	.227	3.486
MACGAGE	Caregiver age in years	-.035	.127	0.870
MACGEXP	Caregiver experience in years	-.050	-.045	0.165
MACGEDUC	Caregiver education in years	-.019	-.093	0.755
CGCHILD	Caregiver's child is present	.051	.198	2.553
CGREL	Caregiver's relative is present	-.167	-.066	0.540
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.200	-.261	6.025*
AVGAGEC	Average age of children (in months) excluding infants	-.047	-.074	0.294
RATEFEMC	Ratio of female children in home	.019	.027	0.095
RBLACK	Ratio of Black children in home	.105	-.120	0.214
RWHITE	Ratio of White children in home	-.013	-.177	0.681
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.098	-.200	0.877
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.129	-.218	0.914
BS1E1	Interaction of San Antonio-Black homes vs others	-.024	.089	0.298
BS1E2	Interaction of San Antonio-White homes vs others	-.097	-.039	0.042
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.126	.024	0.028
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.038	-.059	0.109
BS2E1	Interaction of Philadelphia-Black homes vs others	.280	.347	3.712
BST1E1	Interaction of Regulated-Black homes vs others	.002	-.077	0.176
BST1E2	Interaction of Regulated-White homes vs others	-.009	-.214	0.691
BST2E1	Interaction of Unregulated-Black homes vs others	-.034	-.281	2.402
BST2E2	Interaction of Unregulated-White homes vs others	-.153	-.481	3.957*

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.287$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN STRUCTURED FINE MOTOR"

(n = 155)

Dependent Variable: **C2V08**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.012	.271	2.121
BINSITE1	Binary on San Antonio vs others	.063	.100	0.146
BINSITE2	Binary on Philadelphia vs others	.004	-.154	0.482
BINSTAT1	Binary on Regulated vs others	-.128	.204	0.619
BINSTAT2	Binary on Unregulated vs others	-.047	-.075	0.081
BINETH1	Binary on Black homes vs others	-.037	.434	2.094
BINETH2	Binary on White homes vs others	.094	.483	1.927
NCT012C	Number of children less than 12 months	.013	.024	0.067
NC1235C	Number of children 12-35 months	-.098	-.031	0.059
NC3659C	Number of children 36-59 months	.041	.083	0.645
NC59PLC	Number of children 60+ months	.099	.245	3.608
MACGAGE	Caregiver age in years	-.006	-.033	0.054
MACGEXP	Caregiver experience in years	.129	.147	1.555
MACGEDUC	Caregiver education in years	.110	.085	0.565
CGCHILD	Caregiver's child is present	-.045	-.063	0.230
CGREL	Caregiver's relative is present	-.156	-.138	2.070
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.079	-.176	2.437
AVGAGEC	Average age of children (in months) excluding infants	.083	-.072	0.252
RATEFEMC	Ratio of female children in home	-.117	-.153	2.797
RBLACK	Ratio of Black children in home	-.062	-.115	0.175
RWHITE	Ratio of White children in home	.067	-.026	0.013
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.074	-.054	0.056
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.091	-.154	0.409
BS1E1	Interaction of San Antonio-Black homes vs others	-.063	-.190	1.212
BS1E2	Interaction of San Antonio-White homes vs others	-.020	-.083	0.174
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.096	.017	0.012
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.024	-.007	0.001
BS2E1	Interaction of Philadelphia-Black homes vs others	-.036	-.079	0.170
BST1E1	Interaction of Regulated-Black homes vs others	-.059	.091	0.217
BST1E2	Interaction of Regulated-White homes vs others	-.032	-.152	0.309
BST2E1	Interaction of Unregulated-Black homes vs others	-.015	.130	0.459
BST2E2	Interaction of Unregulated-White homes vs others	.009	-.046	0.033

Total R^2 = 0.200

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN EXPLORATORY FINE MOTOR ALONE"

(n = 155)

Dependent Variable: C2V09

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.022	-.083	0.216
BINSITE1	Binary on San Antonio vs others	.119	.275	1.179
BINSITE2	Binary on Philadelphia vs others	-.000	-.460	4.625*
BINSTAT1	Binary on Regulated vs others	-.071	-.076	0.091
BINSTAT2	Binary on Unregulated vs others	.278	-.190	0.546
BINETH1	Binary on Black homes vs others	.057	-.207	0.513
BINETH2	Binary on White homes vs others	-.020	.212	0.400
NCTO12C	Number of children less than 12 months	-.011	-.075	0.705
NC1235C	Number of children 12-35 months	-.009	.025	0.043
NC3659C	Number of children 36-59 months	.083	.044	0.196
NC59PLC	Number of children 60+ months	.003	-.154	1.531
MACCAGE	Caregiver age in years	-.022	.020	0.020
MACCEXP	Caregiver experience in years	-.006	.084	0.552
MACCEDUC	Caregiver education in years	-.031	-.192	3.076
CGCHILD	Caregiver's child is present	.123	.206	2.641
CGREL	Caregiver's relative is present	.047	-.018	0.038
STDAGEC	Standard deviation of child ages (in months) excluding infants	.046	.115	1.129
AVGAGEC	Average age of children (in months) excluding infants	.037	.034	0.060
RATEFEMC	Ratio of female children in home	.080	.074	0.709
RBLACK	Ratio of Black children in home	.092	.310	1.356
RWHITE	Ratio of White children in home	-.028	.140	0.405
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.058	-.152	0.484
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.196	.218	0.878
BS1E1	Interaction of San Antonio-Black homes vs others	.088	.050	0.091
BS1E2	Interaction of San Antonio-White homes vs others	.030	-.181	0.878
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.035	.217	2.131
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.284	.626	11.558*
BS2E1	Interaction of Philadelphia-Black homes vs others	.046	.156	0.717
BST1E1	Interaction of Regulated-Black homes vs others	.010	.070	0.136
BST1E2	Interaction of Regulated-White homes vs others	-.057	-.045	0.029
BST2E1	Interaction of Unregulated-Black homes vs others	.230	-.035	0.036
BST2E2	Interaction of Unregulated-White homes vs others	.162	-.066	0.072

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.255$

Residual Degrees of Freedom = 122

41

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN EXPLORATORY FINE MOTOR ACTIVITY WITH YOUNG CHILD"

(n = 155)

Dependent Variable: C2V10

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.042	-.124	0.460
BINSITE1	Binary on San Antonio vs others	.179	.315	1.480
BINSITE2	Binary on Philadelphia vs others	-.169	.035	0.026
BINSTAT1	Binary on Regulated vs others	.107	.197	0.595
BINSTAT2	Binary on Unregulated vs others	.002	.023	0.008
BINETH1	Binary on Black homes vs others	.041	.556	3.535
BINETH2	Binary on White homes vs others	.032	.036	0.011
NCT012C	Number of children less than 12 months	.099	.053	0.346
NC1235C	Number of children 12-35 months	.028	-.132	1.119
NC3659C	Number of children 36-59 months	.004	-.029	0.080
NC59PLC	Number of children 60+ months	.080	.211	2.757
MACGAGE	Caregiver age in years	-.095	-.192	1.831
MACGEXP	Caregiver experience in years	.153	.299	6.637*
MACGEDUC	Caregiver education in years	.074	.036	0.105
CGCHILD	Caregiver's child is present	.122	.141	1.193
CGREL	Caregiver's relative is present	-.099	-.029	0.092
STDAGEC	Standard deviation of child ages (in months) excluding infants	.071	-.045	0.164
AVGAGEC	Average age of children (in months) excluding infants	.023	-.165	1.340
RATEFEMC	Ratio of female children in home	-.074	-.070	0.603
RBLACK	Ratio of Black children in home	-.014	-.295	1.179
RWHITE	Ratio of White children in home	-.004	-.236	1.113
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.165	-.076	0.117
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.033	-.167	0.493
BS1E1	Interaction of San Antonio-Black homes vs others	.071	-.186	1.200
BS1E2	Interaction of San Antonio-White homes vs others	.185	.022	0.012
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.097	-.010	0.004
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.049	-.135	0.515
BS2E1	Interaction of Philadelphia-Black homes vs others	-.078	-.302	2.577
BST1E1	Interaction of Regulated-Black homes vs others	.064	-.007	0.001
BST1E2	Interaction of Regulated-White homes vs others	.039	-.130	0.233
BST2E1	Interaction of Unregulated-Black homes vs others	-.028	.082	0.188
BST2E2	Interaction of Unregulated-White homes vs others	.099	.195	0.594

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.224$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN EXPLORATORY FINE MOTOR WITH CAREGIVER" (n = 155)

Dependent Variable: C2V11

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.122	.090	0.268
BINSITE1	Binary on San Antonio vs others	.225	.661	7.143*
BINSITE2	Binary on Philadelphia vs others	-.134	.430	4.246*
BINSTAT1	Binary on Regulated vs others	-.164	.148	0.365
BINSTAT2	Binary on Unregulated vs others	.122	-.093	0.139
BINETH1	Binary on Black homes vs others	-.147	.023	0.006
BINETH2	Binary on White homes vs others	.081	.610	3.470
NCT012C	Number of children less than 12 months	-.064	-.036	0.169
NC1235C	Number of children 12-35 months	-.185	.021	0.031
NC3659C	Number of children 36-59 months	-.160	-.163	2.813
NC59PLC	Number of children 60+ months	-.102	-.148	1.484
MACCAGE	Caregiver age in years	.061	.032	0.054
MACCEXP	Caregiver experience in years	.110	.157	2.021
MACCEDUC	Caregiver education in years	-.018	-.029	0.072
CGCHILD	Caregiver's child is present	-.041	.131	1.132
CGREL	Caregiver's relative is present	-.062	-.002	0.000
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.159	-.138	1.709
AVGAGEC	Average age of children (in months) excluding infants	.081	.215	2.494
RATEFEMC	Ratio of female children in home	-.018	-.019	0.049
RBLACK	Ratio of Black children in home	-.171	.126	0.237
RWHITE	Ratio of White children in home	.082	.077	0.131
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.093	.383	3.235
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.228	.205	0.814
BS1E1	Interaction of San Antonio-Black homes vs others	.050	-.017	0.011
BS1E2	Interaction of San Antonio-White homes vs others	.087	-.151	0.645
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.037	.255	3.097
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.074	.146	0.666
BS2E1	Interaction of Philadelphia-Black homes vs others	-.126	.203	1.281
BST1E1	Interaction of Regulated-Black homes vs others	-.162	-.184	0.996
BST1E2	Interaction of Regulated-White homes vs others	-.091	-.517	4.065*
BST2E1	Interaction of Unregulated-Black homes vs others	.020	.054	0.089
BST2E2	Interaction of Unregulated-White homes vs others	.148	-.142	0.349

---

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.292

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN WORK"

(n = 155)

Dependent Variable: C2V12

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.066	-.214	1.314
BINSITE1	Binary on San Antonio vs others	.035	.764	8.329*
BINSITE2	Binary on Philadelphia vs others	-.068	.267	1.429
BINSTAT1	Binary on Regulated vs others	.045	.286	1.193
BINSTAT2	Binary on Unregulated vs others	.017	.178	0.442
BINETH1	Binary on Black homes vs others	.109	.364	1.452
BINETH2	Binary on White homes vs others	-.070	.035	0.010
NCT012C	Number of children less than 12 months	.006	.043	0.212
NC1235C	Number of children 12-35 months	-.013	-.128	1.016
NC3659C	Number of children 36-59 months	-.059	-.047	0.206
NC59PLC	Number of children 60+ months	.072	.140	1.158
MACGAGE	Caregiver age in years	.036	.041	0.080
MACGEXP	Caregiver experience in years	-.060	-.106	0.799
MACGEDUC	Caregiver education in years	-.084	-.129	1.286
CGCHILD	Caregiver's child is present	-.001	.046	0.120
CGREL	Caregiver's relative is present	.112	.196	4.138*
STDAGEC	Standard deviation of child ages (in months) excluding infants	.095	.081	0.513
AVGAGEC	Average age of children (in months) excluding infants	.033	-.134	0.844
RATEFEMC	Ratio of female children in home	-.058	-.111	1.446
RBLACK	Ratio of Black children in home	.092	-.127	0.208
RWHITE	Ratio of White children in home	-.059	.013	0.003
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.047	-.516	5.125*
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.058	-.447	3.388
BS1E1	Interaction of San Antonio-Black homes vs others	.013	-.425	5.971*
BS1E2	Interaction of San Antonio-White homes vs others	.001	-.099	0.244
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.019	-.251	2.611
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.067	-.346	3.237
BS2E1	Interaction of Philadelphia-Black homes vs others	.015	-.202	1.101
BST1E1	Interaction of Regulated-Black homes vs others	.163	.199	1.019
BST1E2	Interaction of Regulated-White homes vs others	-.057	.040	0.021
BST2E1	Interaction of Unregulated-Black homes vs others	.006	.180	0.862
BST2E2	Interaction of Unregulated-White homes vs others	.034	.186	0.516

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.188$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN MUSIC/DANCE"
(n = 155)

Dependent Variable: C2V13

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.010	.027	0.020
BINSITE1	Binary on San Antonio vs others	-.159	-.104	0.149
BINSITE2	Binary on Philadelphia vs others	.021	-.236	1.072
BINSTAT1	Binary on Regulated vs others	-.174	-.173	0.418
BINSTAT2	Binary on Unregulated vs others	.087	.167	0.373
BINETH1	Binary on Black homes vs others	-.048	.361	1.365
BINETH2	Binary on White homes vs others	.063	.215	0.362
NCT012C	Number of children less than 12 months	-.050	-.014	0.022
NC1235C	Number of children 12-35 months	-.078	-.150	1.334
NC3659C	Number of children 36-59 months	-.033	.022	0.044
NC59PLC	Number of children 60+ months	.021	.196	2.200
MACGAGE	Caregiver age in years	-.164	-.073	0.245
MACGEXP	Caregiver experience in years	-.107	.030	0.060
MACGEDUC	Caregiver education in years	.099	.025	0.045
CGCHILD	Caregiver's child is present	.152	.089	0.430
CGREL	Caregiver's relative is present	-.085	-.075	0.584
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.049	-.056	0.230
AVGAGEC	Average age of children (in months) excluding infants	-.053	-.272	3.347
RATEFEMC	Ratio of female children in home	.021	.009	0.009
RBLACK	Ratio of Black children in home	-.060	-.033	0.013
RWHITE	Ratio of White children in home	.058	.013	0.003
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.127	.090	0.151
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.087	-.020	0.007
BS1E1	Interaction of San Antonio-Black homes vs others	-.102	-.127	0.512
BS1E2	Interaction of San Antonio-White homes vs others	-.082	-.035	0.030
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.098	.137	0.746
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.121	.215	1.205
BS2E1	Interaction of Philadelphia-Black homes vs others	-.043	-.174	0.782
BST1E1	Interaction of Regulated-Black homes vs others	-.096	-.072	0.126
BST1E2	Interaction of Regulated-White homes vs others	-.090	-.136	0.234
BST2E1	Interaction of Unregulated-Black homes vs others	-.067	-.229	1.337
BST2E2	Interaction of Unregulated-White homes vs others	.118	-.227	0.737

Total R^2 = 0.153

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN GROSS MOTOR ACTIVITY"

(n = 155)

Dependent Variable: C2V14

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.010	-.187	1.071
BINSITE1	Binary on San Antonio vs others	.043	.051	0.040
BINSITE2	Binary on Philadelphia vs others	-.097	-.148	0.468
BINSTAT1	Binary on Regulated vs others	.144	.121	0.228
BINSTAT2	Binary on Unregulated vs others	-.169	.134	0.269
BINETH1	Binary on Black homes vs others	.079	-.255	0.761
BINETH2	Binary on White homes vs others	-.125	-.170	0.251
NCT012C	Number of children less than 12 months	-.162	-.198	4.875*
NC1235C	Number of children 12-35 months	.118	.204	2.746
NC3659C	Number of children 36-59 months	.074	-.072	0.514
NC59PLC	Number of children 60+ months	.016	-.140	1.241
MACGAGE	Caregiver age in years	.062	.199	2.014
MACGEXP	Caregiver experience in years	.001	-.142	1.536
MACGEDUC	Caregiver education in years	.053	.214	3.769
CGCHILD	Caregiver's child is present	.018	.079	0.380
CGREL	Caregiver's relative is present	-.058	-.030	0.107
STDAGEC	Standard deviation of child ages (in months) excluding infants	.089	-.012	0.013
AVGAGEC	Average age of children (in months) excluding infants	-.004	.280	3.961*
RATEFEMC	Ratio of female children in home	.122	.168	3.533
RBLACK	Ratio of Black children in home	.058	-.071	0.070
RWHITE	Ratio of White children in home	-.076	-.037	0.029
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.174	.040	0.034
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.144	-.072	0.094
BS1E1	Interaction of San Antonio-Black homes vs others	.004	.093	0.308
BS1E2	Interaction of San Antonio-White homes vs others	-.019	.036	0.034
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.113	-.245	2.687
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.056	.125	0.453
BS2E1	Interaction of Philadelphia-Black homes vs others	.062	.387	4.344*
BST1E1	Interaction of Regulated-Black homes vs others	.026	-.027	0.020
BST1E2	Interaction of Regulated-White homes vs others	.080	.073	0.076
BST2E1	Interaction of Unregulated-Black homes vs others	-.044	-.276	2.173
BST2E2	Interaction of Unregulated-White homes vs others	-.198	-.305	1.490

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.242$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 WATCHES ANY TV ALONE"

(n = 155)

Dependent Variable: C2V15

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.101	-.006	0.001
BINSITE1	Binary on San Antonio vs others	-.124	-.084	0.102
BINSITE2	Binary on Philadelphia vs others	-.010	-.236	1.135
BINSTAT1	Binary on Regulated vs others	-.078	-.116	0.202
BINSTAT2	Binary on Unregulated vs others	.040	.088	0.110
BINETH1	Binary on Black homes vs others	-.089	-.112	0.141
BINETH2	Binary on White homes vs others	.041	.259	0.557
NCT012C	Number of children less than 12 months	.001	.050	0.300
NC1235C	Number of children 12-35 months	-.154	-.031	0.062
NC3659C	Number of children 36-59 months	-.091	-.037	0.126
NC59PLC	Number of children 60+ months	.000	-.266	4.286*
MACGAGE	Caregiver age in years	-.017	-.004	0.001
MACGEXP	Caregiver experience in years	-.077	-.097	0.682
MACGEDUC	Caregiver education in years	-.188	-.303	7.188*
CGCHILD	Caregiver's child is present	-.009	-.037	0.080
CGREL	Caregiver's relative is present	.034	.038	0.162
STDAGEC	Standard deviation of child ages (in months) excluding infants	.096	.200	3.174
AVGAGEC	Average age of children (in months) excluding infants	.178	.238	2.726
RATEFEMC	Ratio of female children in home	-.119	-.112	1.491
RBLACK	Ratio of Black children in home	-.040	.361	1.724
RWHITE	Ratio of White children in home	.042	.198	0.759
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.074	.112	0.248
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.007	-.043	0.032
BS1E1	Interaction of San Antonio-Black homes vs others	-.139	-.097	0.318
BS1E2	Interaction of San Antonio-White homes vs others	-.037	-.123	0.382
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.002	.140	0.832
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.047	.026	0.018
BS2E1	Interaction of Philadelphia-Black homes vs others	-.038	.062	0.105
BST1E1	Interaction of Regulated-Black homes vs others	-.024	-.039	0.039
BST1E2	Interaction of Regulated-White homes vs others	-.050	-.121	0.199
BST2E1	Interaction of Unregulated-Black homes vs others	-.065	-.083	0.188
BST2E2	Interaction of Unregulated-White homes vs others	.038	-.108	0.178

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.204$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 WATCHES EDUCATIONAL TV WITH SOMEONE"

(n = 155)

Dependent Variable: C2V16

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.042	.121	0.465
BINSITE1	Binary on San Antonio vs others	-.093	-.285	1.287
BINSITE2	Binary on Philadelphia vs others	.255	.269	1.606
BINSTAT1	Binary on Regulated vs others	.005	.195	0.612
BINSTAT2	Binary on Unregulated vs others	-.092	-.083	0.107
BINETH1	Binary on Black homes vs others	.136	.258	0.805
BINETH2	Binary on White homes vs others	-.076	.157	0.222
NCT012C	Number of children less than 12 months	-.061	-.071	0.649
NC1235C	Number of children 12-35 months	.129	.067	0.308
NC3659C	Number of children 36-59 months	.065	.138	1.936
NC59PLC	Number of children 60+ months	-.126	-.114	0.848
MACGAGE	Caregiver age in years	.084	-.053	0.146
MACGEXP	Caregiver experience in years	.003	.001	0.000
MACGEDUC	Caregiver education in years	-.036	-.132	1.486
CGCHILD	Caregiver's child is present	-.148	-.259	4.237*
CGREL	Caregiver's relative is present	-.061	-.141	2.370
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.026	.120	1.236
AVGAGEC	Average age of children (in months) excluding infants	-.130	-.045	0.105
RATEFEMC	Ratio of female children in home	.012	-.041	0.214
RBLACK	Ratio of Black children in home	.130	.177	0.417
RWHITE	Ratio of White children in home	-.080	-.115	0.280
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.037	.289	1.538
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.076	.374	2.618
BS1E1	Interaction of San Antonio-Black homes vs others	.037	.138	0.692
BS1E2	Interaction of San Antonio-White homes vs others	-.143	-.214	1.245
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.170	.090	0.372
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.038	.109	0.354
BS2E1	Interaction of Philadelphia-Black homes vs others	.147	-.027	0.021
BST1E1	Interaction of Regulated-Black homes vs others	.028	-.444	5.630*
BST1E2	Interaction of Regulated-White homes vs others	-.039	-.055	0.044
BST2E1	Interaction of Unregulated-Black homes vs others	-.088	-.360	3.814
BST2E2	Interaction of Unregulated-White homes vs others	-.046	.165	0.453

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.266

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 WATCHES NONEDUCATIONAL TV WITH SOMEONE"

(n = 155)

Dependent Variable: C2V17

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.076	.131	0.502
BINSITE1	Binary on San Antonio vs others	.184	.260	0.991
BINSITE2	Binary on Philadelphia vs others	.052	.141	0.412
BINSTAT1	Binary on Regulated vs others	.080	.031	0.014
BINSTAT2	Binary on Unregulated vs others	.025	.006	0.000
BINETH1	Binary on Black homes vs others	-.092	.220	0.545
BINETH2	Binary on White homes vs others	.045	-.030	0.007
NCTU12C	Number of children less than 12 months	.041	.007	0.006
NC1235C	Number of children 12-35 months	-.012	-.055	0.192
NC3659C	Number of children 36-59 months	-.006	.025	0.057
NC59PLC	Number of children 60+ months	-.143	-.158	1.527
MACGAGE	Caregiver age in years	.094	.051	0.130
MACGEXP	Caregiver experience in years	.038	-.172	2.176
MACGEDUC	Caregiver education in years	-.163	-.150	1.768
CGCHILD	Caregiver's child is present	-.113	-.128	0.972
CGREL	Caregiver's relative is present	.015	.031	0.108
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.080	.023	0.044
AVGAGEC	Average age of children (in months) excluding infants	-.043	.053	0.136
RATEFEMC	Ratio of female children in home	-.053	-.077	0.725
RBLACK	Ratio of Black children in home	-.092	.008	0.001
RWHITE	Ratio of White children in home	.066	.162	0.514
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.169	.181	0.649
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.071	.033	0.019
BS1E1	Interaction of San Antonio-Black homes vs others	-.070	-.290	2.361
BS1E2	Interaction of San Antonio-White homes vs others	.152	-.151	0.577
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.088	.101	0.434
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.046	.021	0.012
BS2E1	Interaction of Philadelphia-Black homes vs others	.013	-.049	0.066
BST1E1	Interaction of Regulated-Black homes vs others	-.117	-.147	0.571
BST1E2	Interaction of Regulated-White homes vs others	.177	.179	0.438
BST2E1	Interaction of Unregulated-Black homes vs others	.073	.155	0.661
BST2E2	Interaction of Unregulated-White homes vs others	-.065	.092	0.130

Total R^2 = 0.211

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN PHYSICAL NEEDS ALONE"

(n = 155)

Dependent Variable: C2V18

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.231	.285	2.516
BINSITE1	Binary on San Antonio vs others	.138	.076	0.089
BINSITE2	Binary on Philadelphia vs others	-.006	.258	1.449
BINSTAT1	Binary on Regulated vs others	.019	.269	1.151
BINSTAT2	Binary on Unregulated vs others	.100	.258	1.009
BINETH1	Binary on Black homes vs others	-.137	-.360	1.542
BINETH2	Binary on White homes vs others	-.074	-.244	0.525
NCTO12C	Number of children less than 12 months	.034	-.018	0.040
NC1235C	Number of children 12-35 months	.067	-.006	0.002
NC3659C	Number of children 36-59 months	-.069	-.051	0.264
NC59PLC	Number of children 60+ months	-.086	.028	0.050
MACGAGE	Caregiver age in years	-.099	-.059	0.182
MACGEXP	Caregiver experience in years	-.006	-.029	0.067
MACGEDUC	Caregiver education in years	.034	.319	8.470*
CGCHILD	Caregiver's child is present	.080	-.027	0.046
CGREL	Caregiver's relative is present	-.046	-.002	0.001
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.073	-.105	0.940
AVGAGEC	Average age of children (in months) excluding infants	-.142	-.103	0.541
RATEFEMC	Ratio of female children in home	-.035	-.055	0.386
RBLACK	Ratio of Black children in home	-.099	.076	0.081
RWHITE	Ratio of White children in home	-.064	-.025	0.013
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.100	.079	0.129
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.101	.063	0.072
BS1E1	Interaction of San Antonio-Black homes vs others	-.126	-.088	0.275
BS1E2	Interaction of San Antonio-White homes vs others	.071	.049	0.063
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.062	-.234	2.460
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.047	-.132	0.511
BS2E1	Interaction of Philadelphia-Black homes vs others	.058	.150	0.657
BST1E1	Interaction of Regulated-Black homes vs others	-.055	.026	0.019
BST1E2	Interaction of Regulated-White homes vs others	-.046	-.044	0.028
BST2E1	Interaction of Unregulated-Black homes vs others	.001	-.011	0.004
BST2E2	Interaction of Unregulated-White homes vs others	-.001	-.087	0.123

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.252$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN PHYSICAL NEEDS WHILE INTERACTING WITH CAREGIVER"

(n = 155)

Dependent Variable: C2V19

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.266	.176	1.018
BINSITE1	Binary on San Antonio vs others	.220	-.084	0.117
BINSITE2	Binary on Philadelphia vs others	-.174	.169	0.661
BINSTAT1	Binary on Regulated vs others	-.069	.041	0.029
BINSTAT2	Binary on Unregulated vs others	.080	-.077	0.094
BINETH1	Binary on Black homes vs others	-.222	-.612	4.712*
BINETH2	Binary on White homes vs others	.005	-.377	1.333
NCTO12C	Number of children less than 12 months	-.074	-.112	1.664
NC1235C	Number of children 12-35 months	-.018	-.017	0.020
NC3659C	Number of children 36-59 months	-.083	-.011	0.014
NC59PLC	Number of children 60+ months	-.124	.041	0.114
MACGAGE	Caregiver age in years	.003	-.130	0.920
MACGEXP	Caregiver experience in years	.012	-.014	0.016
MACGEDUC	Caregiver education in years	-.000	.302	8.047*
CGCHILD	Caregiver's child is present	-.055	-.188	2.323
CGREL	Caregiver's relative is present	-.004	-.027	0.093
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.165	-.139	1.735
AVGAGEC	Average age of children (in months) excluding infants	-.144	-.143	1.109
RATEFEMC	Ratio of female children in home	.047	.050	0.338
RBLACK	Ratio of Black children in home	-.180	.154	0.353
RWHITE	Ratio of White children in home	-.034	-.206	0.929
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.003	-.061	0.082
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.252	.271	1.427
BS1E1	Interaction of San Antonio-Black homes vs others	-.035	.129	0.628
BS1E2	Interaction of San Antonio-White homes vs others	.151	.220	1.363
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.102	-.175	1.454
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.113	-.051	0.081
BS2E1	Interaction of Philadelphia-Black homes vs others	-.146	.018	0.010
BST1E1	Interaction of Regulated-Black homes vs others	-.180	.017	0.008
BST1E2	Interaction of Regulated-White homes vs others	.008	.210	0.674
BST2E1	Interaction of Unregulated-Black homes vs others	-.072	-.027	0.023
BST2E2	Interaction of Unregulated-White homes vs others	.050	.109	0.206

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.293$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN CONVERSATION WITH YOUNG CHILD"

(n = 155)

Dependent Variable: C2V20

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.041	.315	3.016
BINSITE1	Binary on San Antonio vs others	.107	.018	0.005
BINSITE2	Binary on Philadelphia vs others	.084	.165	0.579
BINSTAT1	Binary on Regulated vs others	.076	.094	0.136
BINSTAT2	Binary on Unregulated vs others	.031	-.018	0.005
BINETH1	Binary on Black homes vs others	-.048	.119	0.164
BINETH2	Binary on White homes vs others	.158	.074	0.048
NCT012C	Number of children less than 12 months	.280	.176	3.852
NC1235C	Number of children 12-35 months	.212	.168	1.852
NC3659C	Number of children 36-59 months	-.028	-.138	1.886
NC59PLC	Number of children 60+ months	-.036	.042	0.114
MACGAGE	Caregiver age in years	-.116	-.043	0.095
MACGEXP	Caregiver experience in years	.077	.064	0.310
MACGEDUC	Caregiver education in years	.113	.117	1.112
CGCHILD	Caregiver's child is present	.095	.038	0.090
CGREL	Caregiver's relative is present	.008	.091	0.938
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.024	-.032	0.085
AVGAGEC	Average age of children (in months) excluding infants	-.138	.010	0.005
RATEFEMC	Ratio of female children in home	-.008	-.017	0.036
RBLACK	Ratio of Black children in home	-.049	.163	0.368
RWHITE	Ratio of White children in home	.128	.176	0.631
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.170	.085	0.149
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.008	.041	0.030
BS1E1	Interaction of San Antonio-Black homes vs others	-.053	.103	0.370
BS1E2	Interaction of San Antonio-White homes vs others	.234	.087	0.198
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.014	-.100	0.438
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.080	.045	0.057
BS2E1	Interaction of Philadelphia-Black homes vs others	.078	.176	0.893
BST1E1	Interaction of Regulated-Black homes vs others	-.030	-.125	0.425
BST1E2	Interaction of Regulated-White homes vs others	.106	.043	0.027
BST2E1	Interaction of Unregulated-Black homes vs others	-.094	-.178	0.892
BST2E2	Interaction of Unregulated-White homes vs others	.174	.184	0.542

Total R^2 = 0.236

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ENGAGES IN CONVERSATION WITH CAREGIVER"
(n = 155)

Dependent Variable: C2V21

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.005	.093	0.244
BINSITE1	Binary on San Antonio vs others	.199	.021	0.006
BINSITE2	Binary on Philadelphia vs others	-.038	.271	1.459
BINSTAT1	Binary on Regulated vs others	.006	.261	0.985
BINSTAT2	Binary on Unregulated vs others	.106	.031	0.014
BINETH1	Binary on Black homes vs others	.010	.079	0.067
BINETH2	Binary on White homes vs others	.037	-.003	0.000
NCT012C	Number of children less than 12 months	-.046	-.079	0.721
NC1235C	Number of children 12-35 months	.029	.009	0.005
NC3659C	Number of children 36-59 months	-.111	-.085	0.655
NC59PLC	Number of children 60+ months	-.066	.054	0.173
MACGAGE	Caregiver age in years	.085	-.038	0.069
MACGEXP	Caregiver experience in years	.031	-.018	0.023
MACGEDUC	Caregiver education in years	.017	.055	0.230
CGCHILD	Caregiver's child is present	-.122	-.156	1.373
CGREL	Caregiver's relative is present	.011	-.004	0.002
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.049	-.021	0.034
AVGAGEC	Average age of children (in months) excluding infants	-.109	-.125	0.732
RATEFEMC	Ratio of female children in home	.079	.060	0.419
RBLACK	Ratio of Black children in home	-.013	-.005	0.000
RWHITE	Ratio of White children in home	.035	-.014	0.004
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.070	.056	0.059
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.188	.039	0.025
BS1E1	Interaction of San Antonio-Black homes vs others	.200	.117	0.447
BS1E2	Interaction of San Antonio-White homes vs others	.103	.070	0.118
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.024	-.005	0.001
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.152	-.259	1.790
BS2E1	Interaction of Philadelphia-Black homes vs others	-.055	-.151	0.606
BST1E1	Interaction of Regulated-Black homes vs others	-.081	-.218	1.215
BST1E2	Interaction of Regulated-White homes vs others	.031	-.078	0.081
BST2E1	Interaction of Unregulated-Black homes vs others	.159	.284	2.124
BST2E2	Interaction of Unregulated-White homes vs others	.050	.223	0.740

Total R^2 = 0.179

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ANTISOCIAL TO YOUNG CHILD"

(n = 155)

Dependent Variable: C2V22

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.045	.013	0.006
BINSITE1	Binary on San Antonio vs others	.152	.167	0.438
BINSITE2	Binary on Philadelphia vs others	.082	.188	0.784
BINSTAT1	Binary on Regulated vs others	.088	.002	0.000
BINSTAT2	Binary on Unregulated vs others	-.008	.053	0.042
BINETH1	Binary on Black homes vs others	.005	.077	0.071
BINETH2	Binary on White homes vs others	.048	-.107	0.102
NCT012C	Number of children less than 12 months	.111	.046	0.269
NC1235C	Number of children 12-35 months	.370	.331	7.428*
NC3659C	Number of children 36-59 months	.234	.102	1.063
NC59PLC	Number of children 60+ months	-.084	-.024	0.037
MACGAGE	Caregiver age in years	-.011	.088	0.404
MACGEXP	Caregiver experience in years	.036	.014	0.016
MACGEDUC	Caregiver education in years	.106	.061	0.314
CGCHILD	Caregiver's child is present	.068	.157	1.549
CGREL	Caregiver's relative is present	.169	.158	2.967
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.035	-.063	0.338
AVGAGEC	Average age of children (in months) excluding infants	-.170	.017	0.015
RATEFEMC	Ratio of female children in home	.018	.024	0.072
RBLACK	Ratio of Black children in home	-.030	-.189	0.508
RWHITE	Ratio of White children in home	.083	.139	0.405
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.144	-.081	0.138
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.030	-.096	0.171
BS1E1	Interaction of San Antonio-Black homes vs others	.085	.069	0.174
BS1E2	Interaction of San Antonio-White homes vs others	.105	.096	0.252
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.117	.079	0.288
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.039	-.128	0.489
BS2E1	Interaction of Philadelphia-Black homes vs others	.010	.006	0.001
BST1E1	Interaction of Regulated-Black homes vs others	-.034	-.080	0.182
BST1E2	Interaction of Regulated-White homes vs others	.109	-.014	0.003
BST2E1	Interaction of Unregulated-Black homes vs others	.056	.104	0.316
BST2E2	Interaction of Unregulated-White homes vs others	-.014	-.051	0.044

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.262$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 CONTROLS A YOUNG CHILD"

(n = 155)

Dependent Variable: C2V23

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.020	-.073	0.163
BINSITE1	Binary on San Antonio vs others	.262	.224	0.776
BINSITE2	Binary on Philadelphia vs others	-.033	.044	0.043
BINSTAT1	Binary on Regulated vs others	.046	.239	0.907
BINSTAT2	Binary on Unregulated vs others	-.057	.084	0.106
BINETH1	Binary on Black homes vs others	.108	.286	0.970
BINETH2	Binary on White homes vs others	-.043	-.053	0.025
NCT012C	Number of children less than 12 months	.160	.188	4.474*
NC1235C	Number of children 12-35 months	.128	-.018	0.022
NC3659C	Number of children 36-59 months	.173	.161	2.608
NC59PLC	**Number of children 60+ months**	-.038	.112	0.803
MACCAGE	Caregiver age in years	.027	.127	0.831
MACCEXP	Caregiver experience in years	.000	-.050	0.196
MACGEDUC	Caregiver education in years	.092	.094	0.728
CGCHILD	**Caregiver's child is present**	-.002	.076	0.358
CGREL	**Caregiver's relative is present**	-.064	-.100	1.175
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.049	-.045	0.173
AVGAGEC	Average age of children (in months) excluding infants	-.080	-.068	0.236
RATEFEMC	Ratio of female children in home	.102	.093	1.112
RBLACK	Ratio of Black children in home	.023	-.189	0.501
RWHITE	Ratio of White children in home	.010	.054	0.061
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.164	-.075	0.119
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.070	.025	0.012
BS1E1	Interaction of San Antonio-Black homes vs others	.270	.269	2.598
BS1E2	Interaction of San Antonio-White homes vs others	.082	.061	0.099
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.016	.053	0.125
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.030	.104	0.316
BS2E1	Interaction of Philadelphia-Black homes vs others	-.035	.040	0.048
BST1E1	Interaction of Regulated-Black homes vs others	.013	-.349	3.409
BST1E2	Interaction of Regulated-White homes vs others	.008	-.256	0.938
BST2E1	Interaction of Unregulated-Black homes vs others	-.034	-.344	3.410
BST2E2	Interaction of Unregulated-White homes vs others	-.016	-.161	0.421

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.251$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 CONTROLLED BY CAREGIVER"

(n = 155)

Dependent Variable: C2V24

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.102	-.252	2.024
BINSITE1	Binary on San Antonio vs others	-.071	.007	0.001
BINSITE2	Binary on Philadelphia vs others	.252	.538	6.489*
BINSTAT1	Binary on Regulated vs others	-.064	.234	0.892
BINSTAT2	Binary on Unregulated vs others	.083	.336	1.759
BINETH1	Binary on Black homes vs others	.119	.016	0.003
BINETH2	Binary on White homes vs others	-.066	-.048	0.021
NCT012C	Number of children less than 12 months	.034	.077	0.772
NC1235C	Number of children 12-35 months	-.025	-.123	1.048
NC3659C	Number of children 36-59 months	-.055	.041	0.172
NC59PLC	Number of children 60+ months	-.071	.054	0.194
MACGAGE	Caregiver age in years	-.014	.190	1.912
MACGEXP	Caregiver experience in years	-.015	-.014	0.015
MACGEDUC	Caregiver education in years	-.043	-.036	0.109
CGCHILD	Caregiver's child is present	.110	.181	2.086
CGREL	Caregiver's relative is present	-.055	-.005	0.003
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.081	-.039	0.131
AVGAGEC	Average age of children (in months) excluding infants	-.107	-.147	1.144
RATEFEMC	Ratio of female children in home	-.022	-.018	0.043
RBLACK	Ratio of Black children in home	.134	-.271	1.059
RWHITE	Ratio of White children in home	-.101	-.415	3.675
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.026	.163	0.575
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.006	-.027	0.014
BS1E1	Interaction of San Antonio-Black homes vs others	-.007	.057	0.121
BS1E2	Interaction of San Antonio-White homes vs others	-.054	-.135	0.503
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.056	-.214	2.129
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.032	-.469	6.652*
BS2E1	Interaction of Philadelphia-Black homes vs others	.299	.232	1.620
BST1E1	Interaction of Regulated-Black homes vs others	-.035	-.205	1.213
BST1E2	Interaction of Regulated-White homes vs others	-.071	.017	0.004
BST2E1	Interaction of Unregulated-Black homes vs others	.063	-.023	0.158
BST2E2	Interaction of Unregulated-White homes vs others	.027	.158	0.417

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.273$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 MONITORING - TOTAL"

(n = 155)

Dependent Variable: C2V25

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.038	-.033	0.040
BINSITE1	Binary on San Antonio vs others	-.187	-.771	11.034*
BINSITE2	Binary on Philadelphia vs others	-.216	.166	0.718
BINSTAT1	Binary on Regulated vs others	.076	-.163	0.504
BINSTAT2	Binary on Unregulated vs others	-.131	-.366	2.422
BINETH1	Binary on Black homes vs others	.113	-.020	0.005
BINETH2	Binary on White homes vs others	-.114	-.813	6.994*
NCTO12C	Number of children less than 12 months	-.067	-.003	0.001
NC1235C	Number of children 12-35 months	.053	.064	0.330
NC3659C	Number of children 36-59 months	-.013	.023	0.063
NC59PLC	Number of children 60+ months	.070	.087	0.465
MACGAGE	Caregiver age in years	.168	-.004	0.001
MACGEXP	Caregiver experience in years	.035	.065	0.396
MACGEDUC	Caregiver education in years	.064	.140	1.954
CGCHILD	Caregiver's child is present	-.156	-.141	1.476
CGREL	Caregiver's relative is present	.093	-.065	0.598
STDAGEC	Standard deviation of child ages (in months) excluding infants	.097	.039	0.154
AVGAGEC	Average age of children (in months) excluding infants	-.025	-.172	1.824
RATEFEMC	Ratio of female children in home	.071	.079	0.963
RBLACK	Ratio of Black children in home	.113	-.222	0.829
RWHITE	Ratio of White children in home	-.111	.007	0.001
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.158	-.076	0.145
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.027	.293	1.882
BS1E1	Interaction of San Antonio-Black homes vs others	.060	.028	0.033
BS1E2	Interaction of San Antonio-White homes vs others	-.115	.284	2.583
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.064	-.291	4.577*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.188	-.294	3.043
BS2E1	Interaction of Philadelphia-Black homes vs others	-.154	-.478	8.030*
BST1E1	Interaction of Regulated-Black homes vs others	.121	.344	3.963*
BST1E2	Interaction of Regulated-White homes vs others	.003	.516	4.586*
BST2E1	Interaction of Unregulated-Black homes vs others	.006	.420	6.104*
BST2E2	Interaction of Unregulated-White homes vs others	-.110	.443	3.830

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.375$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 ALONE - TOTAL"

(n = 155)

Dependent Variable: C2V26

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.007	.097	0.274
BINSITE1	Binary on San Antonio vs others	-.009	.046	0.030
BINSITE2	Binary on Philadelphia vs others	-.096	-.347	2.462
BINSTAT1	Binary on Regulated vs others	-.046	.067	0.068
BINSTAT2	Binary on Unregulated vs others	.170	.027	0.011
BINETH1	Binary on Black homes vs others	.048	-.179	0.356
BINETH2	Binary on White homes vs others	-.034	.155	0.199
NCT012C	Number of children less than 12 months	-.104	-.135	2.181
NC1235C	Number of children 12-35 months	.006	.038	0.092
NC3659C	Number of children 36-59 months	.028	-.015	0.022
NC59PLC	Number of children 60+ months	.048	.049	0.148
MACGAGE	Caregiver age in years	.022	.074	0.269
MACGEXP	Caregiver experience in years	-.017	-.025	0.045
MACGEDUC	Caregiver education in years	.104	.114	1.015
CGCHILD	Caregiver's child is present	.032	.050	0.145
CGREL	Caregiver's relative is present	.067	-.043	0.202
STDAGEC	Standard deviation of child ages (in months) excluding infants	.008	-.040	0.124
AVGAGEC	Average age of children (in months) excluding infants	-.042	-.099	0.473
RATEFEMC	Ratio of female children in home	.093	.064	0.492
RBLACK	Ratio of Black children in home	.082	.217	0.625
RWHITE	Ratio of White children in home	-.022	.186	0.676
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.090	-.206	0.830
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.086	.107	0.199
BS1E1	Interaction of San Antonio-Black homes vs others	.035	-.029	0.028
BS1E2	Interaction of San Antonio-White homes vs others	-.056	-.054	0.073
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.172	-.169	1.209
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.180	.329	2.987
BS2E1	Interaction of Philadelphia-Black homes vs others	-.003	.120	0.398
BST1E1	Interaction of Regulated-Black homes vs others	.025	.210	1.155
BST1E2	Interaction of Regulated-White homes vs others	-.057	-.022	0.007
BST2E1	Interaction of Unregulated-Black homes vs others	.197	.073	0.147
BST2E2	Interaction of Unregulated-White homes vs others	.042	-.214	0.700

Total R^2 = 0.204

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 WITH OTHER YOUNG CHILD - TOTAL"

(n = 155)

Dependent Variable: C2V27

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.117	-.087	0.258
BINSITE1	Binary on San Antonio vs others	.201	.507	4.386*
BINSITE2	Binary on Philadelphia vs others	-.095	.152	0.557
BINSTAT1	Binary on Regulated vs others	.181	.243	1.029
BINSTAT2	Binary on Unregulated vs others	-.044	.186	0.576
BINETH1	Binary on Black homes vs others	-.022	.466	2.845
BINETH2	Binary on White homes vs others	.182	.089	0.077
NCT012C	Number of children less than 12 months	.136	.039	0.207
NC1235C	Number of children 12-35 months	.222	-.030	0.064
NC3659C	Number of children 36-59 months	.145	.015	0.025
NC59PLC	Number of children 60+ months	-.010	.080	0.455
MACGAGE	Caregiver age in years	-.153	-.119	0.806
MACGEXP	Caregiver experience in years	.092	.135	1.540
MACGEDUC	Caregiver education in years	.201	.150	2.059
CGCHILD	Caregiver's child is present	.176	.127	1.111
CGREL	Caregiver's relative is present	-.003	.135	2.339
STDAGEC	Standard deviation of child ages (in months) excluding infants	.107	.119	1.313
AVGAGEC	Average age of children (in months) excluding infants	-.102	-.108	0.658
RATEFEMC	Ratio of female children in home	.067	.068	0.657
RBLACK	Ratio of Black children in home	-.092	-.107	0.178
RWHITE	Ratio of White children in home	.165	-.055	0.069
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.301	-.061	0.086
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.090	-.378	2.894
BS1E1	Interaction of San Antonio-Black homes vs others	.071	-.089	0.313
BS1E2	Interaction of San Antonio-White homes vs others	.235	-.002	0.000
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.059	-.032	0.052
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.001	.136	0.596
BS2E1	Interaction of Philadelphia-Black homes vs others	-.110	-.170	0.933
BST1E1	Interaction of Regulated-Black homes vs others	.003	-.206	1.307
BST1E2	Interaction of Regulated-White homes vs others	.176	-.058	0.053
BST2E1	Interaction of Unregulated-Black homes vs others	-.144	-.181	1.041
BST2E2	Interaction of Unregulated-White homes vs others	.158	.161	0.465

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.321$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CHILD 2 WITH CAREGIVER - TOTAL"

(n = 155)

Dependent Variable: C2V28

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.039	-.100	0.333
BINSITE1	Binary on San Antonio vs others	.075	.412	2.813
BINSITE2	Binary on Philadelphia vs others	.176	.278	1.793
BINSTAT1	Binary on Regulated vs others	-.152	.127	0.271
BINSTAT2	Binary on Unregulated vs others	-.008	.136	0.297
BINETH1	Binary on Black homes vs others	-.017	-.117	0.172
BINETH2	Binary on White homes vs others	.013	.276	0.716
NCT012C	Number of children less than 12 months	-.074	-.026	0.091
NC1235C	Number of children 12-35 months	-.146	-.099	0.694
NC3659C	Number of children 36-59 months	-.119	-.046	0.223
NC59PLC	Number of children 60+ months	-.095	.189	2.463
MACGAGE	Caregiver age in years	-.013	.069	0.264
MACGEXP	Caregiver experience in years	-.011	-.019	0.028
MACGEDUC	Caregiver education in years	-.025	.051	0.232
CGCHILD	Caregiver's child is present	.012	.090	0.540
CGREL	Caregiver's relative is present	-.167	-.075	0.703
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.292	-.287	7.447*
AVGAGEC	Average age of children (in months) excluding infants	-.124	-.163	1.451
RATEFEMC	Ratio of female children in home	.027	[illegible]	0.121
RBLACK	Ratio of Black children in home	-.018	-.135	0.273
RWHITE	Ratio of White children in home	-.019	-.334	2.461
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.091	-.214	1.025
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.091	-.101	0.198
BS1E1	Interaction of San Antonio-Black homes vs others	.010	.096	0.355
BS1E2	Interaction of San Antonio-White homes vs others	.012	-.031	0.028
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.038	-.097	0.448
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.071	-.218	1.494
BS2E1	Interaction of Philadelphia-Black homes vs others	.175	.289	2.618
BST1E1	Interaction of Regulated-Black homes vs others	-.146	-.163	0.792
BST1E2	Interaction of Regulated-White homes vs others	-.044	-.138	0.294
BST2E1	Interaction of Unregulated-Black homes vs others	-.001	-.113	0.397
BST2E2	Interaction of Unregulated-White homes vs others	-.033	-.179	0.554

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.299

Residual Degrees of Freedom = 122

ADULT BEHAVIOR REGRESSIONS

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER TEACHES CHILD 1"

(n = 246)

Dependent Variable: ABC01

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.041	-.206	2.085
BINSITE1	Binary on San Antonio vs others	.132	.404	4.602*
BINSITE2	Binary on Philadelphia vs others	.099	.375	5.195*
BINSTAT1	Binary on Regulated vs others	-.082	.203	1.031
BINSTAT2	Binary on Unregulated vs others	.061	-.064	0.128
BINETH1	Binary on Black homes vs others	.029	.299	1.715
BINETH2	Binary on White homes vs others	-.014	-.037	0.027
NCT012C	Number of children less than 12 months	-.059	-.021	0.101
NC1235C	Number of children 12-35 months	-.124	-.133	3.490
NC3659C	Number of children 36-59 months	-.285	-.219	8.974*
NC59PLC	Number of children 60+ months	-.121	.056	0.383
MACCGAGE	Caregiver age in years	.070	-.024	0.069
MACCGEXP	Caregiver experience in years	.046	.029	0.130
MACCGEDUC	Caregiver education in years	.001	.070	0.831
CGCHILD	Caregiver's child is present	-.159	-.140	3.108
CGREL	Caregiver's relative is present	.035	.034	0.245
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.194	-.040	0.162
AVGAGEC	Average age of children (in months) excluding infants	-.179	-.128	1.069
RATEFEMC	Ratio of female children in home	-.025	.000	0.000
RBLACK	Ratio of Black children in home	-.013	-.434	1.586*
RWHITE	Ratio of White children in home	.029	-.067	0.154
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.050	-.210	1.406
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.256	.075	0.186
BS1E1	Interaction of San Antonio-Black homes vs others	.028	-.226	3.510
BS1E2	Interaction of San Antonio-White homes vs others	.049	-.009	0.004
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.039	-.131	1.115
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.049	-.110	1.372
BS2E1	Interaction of Philadelphia-Black homes vs others	.084	-.054	0.118
BST1E1	Interaction of Regulated-Black homes vs others	-.002	-.031	0.050
BST1E2	Interaction of Regulated-White homes vs others	-.108	-.113	0.540
BST2E1	Interaction of Unregulated-Black homes vs others	.019	.061	0.186
BST2E2	Interaction of Unregulated-White homes vs others	.058	.069	0.169

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.256$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER TEACHES CHILD 2"

(n = 155)

Dependent Variable: ABCO2

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.081	-.089	0.231
BINSITE1	Binary on San Antonio vs others	.041	.374	2.496
BINSITE2	Binary on Philadelphia vs others	.186	.193	0.914
BINSTAT1	Binary on Regulated vs others	-.165	.117	0.252
BINSTAT2	Binary on Unregulated vs others	-.047	.092	0.132
BINETH1	Binary on Black homes vs others	.061	-.124	0.193
BINETH2	Binary on White homes vs others	.023	.254	0.629
NCTO12C	Number of children less than 12 months	-.042	.011	0.016
NC1235C	Number of children 12-35 months	-.257	-.291	6.319*
NC3659C	Number of children 36-59 months	-.096	-.002	0.000
NC59PLC	Number of children 60+ months	-.117	.048	0.157
MACGAGE	Caregiver age in years	.033	.088	0.444
MACGEXP	Caregiver experience in years	-.064	-.113	1.587
MACGEDUC	Caregiver education in years	-.009	.005	0.002
CGCHILD	Caregiver's child is present	-.101	-.062	0.262
CGREL	Caregiver's relative is present	-.157	-.080	0.790
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.194	-.035	0.103
AVGAGEC	Average age of children (in months) excluding infants	-.003	-.125	0.744
RATEFEMC	Ratio of female children in home	-.147	-.160	3.274
RBLACK	Ratio of Black children in home	.059	.179	0.470
RWHITE	Ratio of White children in home	.017	-.039	0.040
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.064	-.228	1.200
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.032	-.201	0.782
BS1E1	Interaction of San Antonio-Black homes vs others	.064	.110	0.480
BS1E2	Interaction of San Antonio-White homes vs others	.023	.182	0.982
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.033	.006	0.002
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.033	.002	0.000
BS2E1	Interaction of Philadelphia-Black homes vs others	.114	.132	0.568
BST1E1	Interaction of Regulated-Black homes vs others	.036	-.115	0.508
BST1E2	Interaction of Regulated-White homes vs others	-.147	-.400	2.601
BST2E1	Interaction of Unregulated-Black homes vs others	-.066	-.273	2.265
BST2E2	Interaction of Unregulated-White homes vs others	.013	-.259	1.153

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.277$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER TEACHES - TOTAL"

(n = 296)

Dependent Variable: ABC03

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.047	-.133	1.133
BINSITE1	Binary on San Antonio vs others	.125	.904	31.359*
BINSITE2	Binary on Philadelphia vs others	.189	.279	4.482*
BINSTAT1	Binary on Regulated vs others	-.076	.011	0.005
BINSTAT2	Binary on Unregulated vs others	-.115	-.117	0.521
BINETH1	Binary on Black homes vs others	.017	.269	1.917
BINETH2	Binary on White homes vs others	.030	.106	0.009
NCT012C	Number of children less than 12 months	-.101	-.129	5.388*
NC1235C	Number of children 12-35 months	.054	.005	0.006
NC3659C	Number of children 36-59 months	.086	.095	2.330
NC59PLC	Number of children 60+ months	-.139	-.005	0.004
MACGAGE	Caregiver age in years	-.070	-.023	0.084
MACGEXP	Caregiver experience in years	.008	-.006	0.007
MACGEDUC	Caregiver education in years	.086	.068	1.068
CGCHILD	Caregiver's child is present	-.011	-.032	0.210
CGREL	Caregiver's relative is present	-.143	-.044	0.561
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.107	-.011	0.021
AVGAGEC	Average age of children (in months) excluding infants	-.074	-.082	0.764
RATEFEMC	Ratio of female children in home	-.081	-.076	1.895
RBLACK	Ratio of Black children in home	-.027	-.189	1.161
RWHITE	Ratio of White children in home	.066	-.003	0.001
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.009	-.444	9.562*
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.006	-.387	6.407*
BS1E1	Interaction of San Antonio-Black homes vs others	-.063	-.191	3.380
BS1E2	Interaction of San Antonio-White homes vs others	.086	.021	0.032
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.092	.041	0.166
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.015	-.032	0.090
BS2E1	Interaction of Philadelphia-Black homes vs others	.137	.023	0.039
BST1E1	Interaction of Regulated-Black homes vs others	-.025	-.127	0.963
BST1E2	Interaction of Regulated-White homes vs others	-.059	-.167	1.143
BST2E1	Interaction of Unregulated-Black homes vs others	-.146	-.118	0.943
BST2E2	Interaction of Unregulated-White homes vs others	.049	.021	0.020

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.303$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER PLAYS/PARTICIPATES WITH CHILD 1" (n = 246)

Dependent Variable: ABC04

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.026	.091	0.418
BINSITE1	Binary on San Antonio vs others	.110	.090	0.237
BINSITE2	Binary on Philadelphia vs others	.135	.507	9.800*
BINSTAT1	Binary on Regulated vs others	-.105	.142	0.521
BINSTAT2	Binary on Unregulated vs others	.146	-.111	0.397
BINETH1	Binary on Black homes vs others	.054	.073	0.104
BINETH2	Binary on White homes vs others	-.056	.083	0.154
NCT012C	Number of children less than 12 months	-.093	-.067	1.121
NC1235C	Number of children 12-35 months	-.181	-.165	5.556*
NC3659C	Number of children 36-59 months	-.280	-.155	4.674*
NC59PLC	Number of children 60+ months	-.094	.055	0.387
MACGAGE	Caregiver age in years	.092	-.052	0.332
MACGEXP	Caregiver experience in years	-.005	-.033	0.178
MACGEDUC	Caregiver education in years	-.096	-.048	0.403
CGCHILD	Caregiver's child is present	-.157	-.136	3.034
CGREL	Caregiver's relative is present	.138	.063	0.885
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.231	-.181	3.385
AVGAGEC	Average age of children (in months) excluding infants	-.182	-.037	0.092
RATEFEMC	Ratio of female children in home	-.033	-.049	0.590
RBLACK	Ratio of Black children in home	.039	-.133	0.444
RWHITE	Ratio of White children in home	-.036	-026	0.023
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.050	-.009	0.003
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.216	.135	0.629
BS1E1	Interaction of San Antonio-Black homes vs others	.113	-.093	0.611
BS1E2	Interaction of San Antonio-White homes vs others	-.006	.092	0.447
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.031	-.116	0.932
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.067	-.086	0.528
BS2E1	Interaction of Philadelphia-Black homes vs others	.065	-.216	2.486
BST1E1	Interaction of Regulated-Black homes vs others	.002	.116	0.592
BST1E2	Interaction of Regulated-White homes vs others	-.132	-.210	1.203
BST2E1	Interaction of Unregulated-Black homes vs others	.192	.304	4.804*
BST2E2	Interaction of Unregulated-White homes vs others	.010	.045	0.073

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05, F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.279$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER PLAYS/PARTICIPATES WITH CHILD 2"

(n = 155)

Dependent Variable: ABC05

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.005	.127	0.557
BINSITE1	Binary on San Antonio vs others	-.145	-.147	0.451
BINSITE2	Binary on Philadelphia vs others	.307	.503	7.310*
BINSTAT1	Binary on Regulated vs others	-.219	-.043	0.039
BINSTAT2	Binary on Unregulated vs others	.019	.181	0.598
BINETH1	Binary on Black homes vs others	-.051	-.070	0.072
BINETH2	Binary on White homes vs others	.026	-.149	0.253
NCT012C	Number of children less than 12 months	-.049	.036	0.188
NC1235C	Number of children 12-35 months	.305	-.171	2.554
NC3659C	Number of children 36-59 months	-.180	-.147	2.851
NC59PLC	Number of children 60+ months	-.106	-.155	1.927
MACCGAGE	Caregiver age in years	.026	.019	0.026
MACCGEXP	Caregiver experience in years	-.031	-.033	0.115
MACCGEDUC	Caregiver education in years	-.046	.016	0.030
CGCHILD	Caregiver's child is present	-.142	-.165	2.164
CGREL	Caregiver's relative is present	-.170	-.145	3.034
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.167	-.035	0.124
AVGAGEC	Average age of children (in months) excluding infants	.098	.102	0.577
RATEFEMC	Ratio of female children in home	-.172	-.144	3.126
RBLACK	Ratio of Black children in home	-.040	-.004	0.000
RWHITE	Ratio of White children in home	.082	.191	1.115
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.143	.028	0.021
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.027	-.041	0.038
BS1E1	Interaction of San Antonio-Black homes vs others	-.069	-.021	0.019
BS1E2	Interaction of San Antonio-White homes vs others	-.121	.142	0.702
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.015	-.122	0.908
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.073	-.161	0.974
BS2E1	Interaction of Philadelphia-Black homes vs others	.101	-.118	0.327
BST1E1	Interaction of Regulated-Black homes vs others	-.111	-.017	0.012
BST1E2	Interaction of Regulated-White homes vs others	-.134	-.106	0.216
BST2E1	Interaction of Unregulated-Black homes vs others	.062	.081	0.234
BST2E2	Interaction of Unregulated-White homes vs others	-.078	-.232	1.286

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.383$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER PLAYS/PARTICIPATES - TOTAL"

(n = 296)

Dependent Variable: **ABC06**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.015	.116	0.807
BINSITE1	Binary on San Antonio vs others	-.055	-.025	0.023
BINSITE2	Binary on Philadelphia vs others	.364	.475	12.020*
BINSTAT1	Binary on Regulated vs others	-.093	-.210	1.508
BINSTAT2	Binary on Unregulated vs others	-.028	-.250	2.189
BINETH1	Binary on Black homes vs others	.019	-.162	0.644
BINETH2	Binary on White homes vs others	-.003	-.182	0.819
NCT012C	Number of children less than 12 months	-.109	-.129	4.990*
NC1235C	Number of children 12-35 months	-.049	-.030	0.188
NC3659C	Number of children 36-59 months	-.065	-.059	0.835
NC59PLC	Number of children 60+ months	-.077	-.052	0.443
MACGAGE	Caregiver age in years	-.023	-.065	0.622
MACGEXP	Caregiver experience in years	.013	.020	0.082
MACGEDUC	Caregiver education in years	-.054	-.044	0.415
CGCHILD	Caregiver's child is present	-.067	-.086	1.407
CGREL	Caregiver's relative is present	-.020	-.003	0.002
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.112	-.030	0.141
AVGAGEC	Average age of children (in months) excluding infants	-.037	.013	0.017
RATEFEMC	Ratio of female children in home	-.101	-.096	2.837
RBLACK	Ratio of Black children in home	.020	.038	0.044
RWHITE	Ratio of White children in home	.027	.161	1.138
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.055	.143	0.920
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.015	.126	0.624
BS1E1	Interaction of San Antonio-Black homes vs others	-.061	.011	0.011
BS1E2	Interaction of San Antonio-White homes vs others	-.043	.078	0.404
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.166	.070	0.446
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.125	.011	0.009
BS2E1	Interaction of Philadelphia-Black homes vs others	.214	-.036	0.089
BST1E1	Interaction of Regulated-Black homes vs others	-.061	.055	0.168
BST1E2	Interaction of Regulated-White homes vs others	-.039	.020	0.016
BST2E1	Interaction of Unregulated-Black homes vs others	.072	.188	2.205
BST2E2	Interaction of Unregulated-White homes vs others	-.068	.039	0.062

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.246$

Residual Degrees of Freedom = 263

433

SUMMARY TABLE FOR THE REGRESSION ANALYSIS
OF THE DEPENDENT VARIABLE, "CAREGIVER HELPS CHILD 1"

(n = 246)

Dependent Variable: ABC07

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.220	.125	0.772
BINSITE1	Binary on San Antonio vs others	.118	-.137	0.531
BINSITE2	Binary on Philadelphia vs others	-.057	.209	1.624
BINSTAT1	Binary on Regulated vs others	-.044	-.307	2.366
BINSTAT2	Binary on Unregulated vs others	-.006	-.207	1.339
BINETH1	Binary on Black homes vs others	-.002	.255	1.251
BINETH2	Binary on White homes vs others	-.132	-.044	0.040
NCTO12C	Number of children less than 12 months	-.111	-.074	1.327
NC1235C	Number of children 12-35 months	-.148	-.143	4.017*
NC3659C	Number of children 36-59 months	-.275	-.091	1.565
NC59PLC	Number of children 60+ months	-.107	.117	1.704
MACGAGE	Caregiver age in years	.115	.011	0.014
MACGEXP	Caregiver experience in years	-.032	-.066	0.704
MACGEDUC	Caregiver education in years	-.208	-.082	1.152
CGCHILD	Caregiver's child is present	-.107	-.022	0.080
CGREL	Caregiver's relative is present	.122	.074	1.197
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.082	.264	7.006*
AVGAGEC	Average age of children (in months) excluding infants	-.236	-.529	18.243*
RATEFEMC	Ratio of female children in home	.012	-.016	0.062
RBLACK	Ratio of Black children in home	-.052	-.440	4.711*
RWHITE	Ratio of White children in home	-.137	-.084	0.246
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.064	.309	3.053
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.077	.252	2.124
BS1E1	Interaction of San Antonio-Black homes vs others	.070	-.023	0.037
BS1E2	Interaction of San Antonio-White homes vs others	-.004	-.032	0.051
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.037	-.096	0.612
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.097	-.066	0.305
BS2E1	Interaction of Philadelphia-Black homes vs others	-.020	-.056	0.160
BST1E1	Interaction of Regulated-Black homes vs others	.000	.230	2.250
BST1E2	Interaction of Regulated-White homes vs others	-.057	.210	1.175
BST2E1	Interaction of Unregulated-Black homes vs others	.026	.081	0.333
BST2E2	Interaction of Unregulated-White homes vs others	-.125	.093	0.312

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.257$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER HELPS CHILD 2"

(n = 155)

Dependent Variable: ABC08

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.196	.121	0.406
BINSITE1	Binary on San Antonio vs others	.096	-.076	0.099
BINSITE2	Binary on Philadelphia vs others	-.051	-.046	0.049
BINSTAT1	Binary on Regulated vs others	-.121	-.196	0.671
BINSTAT2	Binary on Unregulated vs others	.030	-.254	0.951
BINETH1	Binary on Black homes vs others	-.015	-.042	0.021
BINETH2	Binary on White homes vs others	-.131	-.173	0.278
NCT012C	Number of children less than 12 months	-.008	.123	1.811
NC1235C	Number of children 12-35 months	-.168	-.292	6.049*
NC3659C	Number of children 36-59 months	-.148	-.011	0.014
NC59PLC	Number of children 60+ months	-.091	.112	0.828
MACGAGE	Caregiver age in years	.133	.253	3.528
MACGEXP	Caregiver experience in years	-.096	-.140	1.673
MACGEDUC	Caregiver education in years	-.110	-.004	0.001
CGCHILD	Caregiver's child is present	-.083	.124	0.981
CGREL	Caregiver's relative is present	-.088	-.203	4.836*
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.159	-.038	0.119
AVGAGEC	Average age of children (in months) excluding infants	-.125	-.375	6.350*
RATEFEMC	Ratio of female children in home	-.014	-.077	0.729
RBLACK	Ratio of Black children in home	-.025	-.129	0.235
RWHITE	Ratio of White children in home	-.095	.051	0.064
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.098	.016	0.006
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.131	.277	1.422
BS1E1	Interaction of San Antonio-Black homes vs others	.130	.035	0.046
BS1E2	Interaction of San Antonio-White homes vs others	-.071	-.036	0.037
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.019	.125	0.786
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.029	.123	0.459
BS2E1	Interaction of Philadelphia-Black homes vs others	-.053	-.054	0.091
BST1E1	Interaction of Regulated-Black homes vs others	-.035	.014	0.007
BST1E2	Interaction of Regulated-White homes vs others	-.097	.059	0.054
BST2E1	Interaction of Unregulated-Black homes vs others	.057	.133	0.511
BST2E2	Interaction of Unregulated-White homes vs others	-.082	.019	0.006

---

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.240$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER HELPS - TOTAL"

(n = 296)

Dependent Variable: ABC09

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.203	.152	1.517
BINSITE1	Binary on San Antonio vs others	.119	.020	0.015
BINSITE2	Binary on Philadelphia vs others	-.051	-.088	0.457
BINSTAT1	Binary on Regulated vs others	.072	-.268	2.716
BINSTAT2	Binary on Unregulated vs others	-.098	-.333	4.280*
BINETH1	Binary on Black homes vs others	-.023	.229	1.411
BINETH2	Binary on White homes vs others	-.106	.005	0.001
NCT012C	Number of children less than 12 months	-.043	-.110	4.034*
NC1235C	Number of children 12-35 months	.325	.223	11.767*
NC3659C	Number of children 36-59 months	-.090	.005	0.006
NC59PLC	Number of children 60+ months	.068	.075	1.004
MACGAGE	Caregiver age in years	-.015	-.053	0.445
MACGEXP	Caregiver experience in years	-.007	-.018	0.076
MACGEDUC	Caregiver education in years	-.146	-.150	5.298*
LGCHILD	Caregiver's child is present	.045	.078	1.278
CGREL	Caregiver's relative is present	.036	.036	0.389
STDAGEC	Standard deviation of child ages (in months) excluding infants	.044	.197	6.841*
AVGAGEC	Average age of children (in months) excluding infants	-.304	-.420	20.350*
RATEFEMC	Ratio of female children in home	.099	.083	2.345
RBLACK	Ratio of Black children in home	-.058	-.257	2.185
RWHITE	Ratio of White children in home	-.098	-.017	0.014
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.131	.131	0.843
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.035	.160	1.114
BS1E1	Interaction of San Antonio-Black homes vs others	-.044	-.061	0.317
BS1E2	Interaction of San Antonio-White homes vs others	.072	-.003	0.002
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.044	.110	1.221
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.045	.108	1.[illegible]11
BS2E1	Interaction of Philadelphia-Black homes vs others	.039	.061	0.[illegible]41
BST1E1	Interaction of Regulated-Black homes vs others	.009	.039	0.092
BST1E2	Interaction of Regulated-White homes vs others	.031	.061	0.833
BST2E1	Interaction of Unregulated-Black homes vs others	-.081	.042	0.122
BST2E2	Interaction of Unregulated-White homes vs others	-.083	.113	0.580

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.314$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER DIRECTS CHILD 1"

(n = 246)

Dependent Variable: ABC10

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home			
BINSITE1	Binary on San Antonio vs others	.258	.096	0.575
BINSITE2	Binary on Philadelphia vs others	.293	.023	0.019
BINSTAT1	Binary on Regulated vs others	-.126	.204	1.936
BINSTAT2	Binary on Unregulated vs others	-.102	-.233	1.701
BINETH1	Binary on Black homes vs others	.155	-.056	0.121
BINETH2	Binary on White homes vs others	-.057	.821	16.165*
NCT012C	Number of children less than 12 months	-.116	.021	0.012
NC1235C	Number of children 12-35 months	-.127	-.048	0.700
NC3659C	Number of children 36-59 months	-.186	-.033	0.270
NC59PLC	Number of children 60+ months	-.312	-.221	11.492*
MACGAGE	Caregiver age in years	-.034	.060	0.362
MACGEXP	Caregiver experience in years	.150	-.084	1.045
MACGEDUC	Caregiver education in years	.077	.058	0.682
CGCHILD	Caregiver's child is present	-.226	-.137	3.970*
CGREL	Caregiver's relative is present	-.146	-.057	0.633
STDAGEC	Standard deviation of child ages (in months) excluding infants	.213	.102	2.828
AVGAGEC	Average age of children (in months) excluding infants	-.075	.005	0.003
RATEFEMC	Ratio of female children in home	-.067	-.099	0.806
RBLACK	Ratio of Black children in home	-.059	-.035	0.358
RWHITE	Ratio of White children in home	-.157	-.717	15.670*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.056	.119	0.616
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.041	.334	4.454*
BS1E1	Interaction of San Antonio-Black homes vs others	.339	.518	11.214*
BS1E2	Interaction of San Antonio-White homes vs others	.170	-.134	2.047
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.012	-.292	5.129*
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.078	-.036	0.262
BS2E1	Interaction of Philadelphia-Black homes vs others	-.098	.008	0.005
BST1E1	Interaction of Regulated-Black homes vs others	-.157	-.221	3.137
BST1E2	Interaction of Regulated-White homes vs others	-.095	.152	1.231
BST2E1	Interaction of Unregulated-Black homes vs others	-.059	.193	1.237
BST2E2	Interaction of Unregulated-White homes vs others	.096	-.030	0.037
		-.110	-.111	0.354

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.406$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER DIRECTS CHILD 2"

(n = 155)

Dependent Variable: ABC11

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.137	.011	0.004
BINSITE1	Binary on San Antonio vs others	.338	.471	4.856*
BINSITE2	Binary on Philadelphia vs others	-.120	.084	0.213
BINSTAT1	Binary on Regulated vs others	-.024	.426	4.091*
BINSTAT2	Binary on Unregulated vs others	.059	.456	3.963*
BINETH1	Binary on Black homes vs others	.085	.022	0.007
BINETH2	Binary on White homes vs others	-.166	.548	3.604
NCTO12C	Number of children less than 12 months	.019	.095	1.402
NC1235C	Number of children 12-35 months	-.226	-.267	6.521*
NC3659C	Number of children 36-59 months	-.123	-.028	0.109
NC59PLC	Number of children 60+ months	-.055	.089	0.676
MACGAGE	Caregiver age in years	.249	.260	4.782*
MACGEXP	Caregiver experience in years	.067	-.017	0.033
MACGEDUC	Caregiver education in years	-.236	-.151	2.688
CGCHILD	Caregiver's child is present	-.119	.172	2.465
CGREL	Caregiver's relative is present	.005	-.055	0.455
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.082	-.058	0.349
AVGAGEC	Average age of children (in months) excluding infants	-.009	-.122	0.861
RATEFEMC	Ratio of female children in home	.008	-.050	0.391
RBLACK	Ratio of Black children in home	.074	.336	2.046
RWHITE	Ratio of White children in home	-.158	-.130	0.541
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.130	-.102	0.298
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.209	-.209	1.043
BS1E1	Interaction of San Antonio-Black homes vs others	.414	.242	2.840
BS1E2	Interaction of San Antonio-White homes vs others	-.002	-.024	0.021
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.080	.104	0.694
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.093	.020	0.016
BS2E1	Interaction of Philadelphia-Black homes vs others	-.121	-.193	1.487
BST1E1	Interaction of Regulated-Black homes vs others	.038	-.271	3.450
BST1E2	Interaction of Regulated-White homes vs others	-.114	-.621	7.707*
BST2E1	Interaction of Unregulated-Black homes vs others	.134	-.220	1.809
BST2E2	Interaction of Unregulated-White homes vs others	-.114	-.503	5.358*

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.412$

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER DIRECTS - TOTAL"

(n = 296)

Dependent Variable: ABC12

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.268	.028	0.049
BINSITE1	Binary on San Antonio vs others	.417	.552	11.604*
BINSITE2	Binary on Philadelphia vs others	-.157	.063	0.223
BINSTAT1	Binary on Regulated vs others	-.009	-.043	0.068
BINSTAT2	Binary on Unregulated vs others	.013	-.023	0.021
BINETH1	Binary on Black homes vs others	-.109	.458	5.500*
BINETH2	Binary on White homes vs others	-.057	.146	0.561
NCT012C	Number of children less than 12 months	-.031	-.036	0.417
NC1235C	Number of children 12-35 months	.033	.101	2.302
NC3659C	Number of children 36-59 months	-.020	-.032	0.266
NC59PLC	Number of children 60+ months	-.021	.032	0.180
MACGAGE	Caregiver age in years	.016	-.096	1.459
MACGEXP	Caregiver experience in years	.084	.084	1.571
MACGEDUC	Caregiver education in years	-.199	-.176	7.086*
CGCHILD	Caregiver's child is present	.013	.090	1.656
CGREL	Caregiver's relative is present	.026	.010	0.028
STDAGEC	Standard deviation of child ages (in months) excluding infants	.009	-.019	0.062
AVGAGEC	Average age of children (in months) excluding infants	-.037	-.049	0.268
RATEFEMC	Ratio of female children in home	.019	.031	0.315
RBLACK	Ratio of Black children in home	-.194	-.405	5.308*
RWHITE	Ratio of White children in home	-.010	-.051	0.122
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.201	-.155	1.157
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.189	-.079	0.265
BS1E1	Interaction of San Antonio-Black homes vs others	.163	.044	0.176
BS1E2	Interaction of San Antonio-White homes vs others	.157	.028	0.055
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.087	.083	0.667
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.078	.151	1.934
BS2E1	Interaction of Philadelphia-Black homes vs others	-.167	-.138	1.424
BST1E1	Interaction of Regulated-Black homes vs others	-.128	-.103	0.633
BST1E2	Interaction of Regulated-White homes vs others	.044	-.072	0.214
BST2E1	Interaction of Unregulated-Black homes vs others	-.009	-.120	0.959
BST2E2	Interaction of Unregulated-White homes vs others	-.084	-.240	2.551

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.298

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONVERSES WITH CHILD 1, NOT NEGATIVE"

(n = 246)

Dependent Variable: ABC13

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.035	.017	0.014
BINSITE1	Binary on San Antonio vs others	-.173	-.348	3.204
BINSITE2	Binary on Philadelphia vs others	.102	.014	0.007
BINSTAT1	Binary on Regulated vs others	-.074	-.111	0.289
BINSTAT2	Binary on Unregulated vs others	.008	-.164	0.785
BINETH1	Binary on Black homes vs others	.014	.176	0.557
BINETH2	Binary on White homes vs others	-.024	.372	2.683
NCT012C	Number of children less than 12 months	-.105	-.054	0.634
NC1235C	Number of children 12-35 months	-.077	-.086	1.360
NC3659C	Number of children 36-59 months	-.252	-.183	5.910*
NC59PLC	Number of children 60+ months	-.036	-.006	0.004
MACGAGE	Caregiver age in years	.108	-.044	0.215
MACGEXP	Caregiver experience in years	.036	.057	0.482
MACGEDUC	Caregiver education in years	-.079	-.043	0.297
CGCHILD	Caregiver's child is present	-.190	-.177	4.667*
CGREL	Caregiver's relative is present	.024	-.043	0.370
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.114	-.059	0.331
AVGAGEC	Average age of children (in months) excluding infants	-.112	.005	0.001
RATEFEMC	Ratio of female children in home	.094	.140	4.420*
RBLACK	Ratio of Black children in home	.022	-.173	0.688
RWHITE	Ratio of White children in home	-.079	-.303	3.000
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.144	.265	2.105
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.004	.424	5.642*
BS1E1	Interaction of San Antonio-Black homes vs others	-.102	-.218	3.982*
BS1E2	Interaction of San Antonio-White homes vs others	-.135	-.186	1.652
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.036	.013	0.111
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.009	.031	0.169
BS2E1	Interaction of Philadelphia-Black homes vs others	.076	-.061	0.183
BST1E1	Interaction of Regulated-Black homes vs others	.019	.070	0.198
BST1E2	Interaction of Regulated-White homes vs others	-.058	.030	0.022
BST2E1	Interaction of Unregulated-Black homes vs others	.024	.111	0.618
BST2E2	Interaction of Unregulated-White homes vs others	-.075	-.001	0.000

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.209

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONVERSES WITH CHILD 2, NOT NEGATIVE"

(n = 155)

Dependent Variable: ABC14

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.118	-.146	0.686
BINSITE1	Binary on San Antonio vs others	-.188	.180	0.637
BINSITE2	Binary on Philadelphia vs others	.247	.412	4.581*
BINSTAT1	Binary on Regulated vs others	-.008	.564	6.402*
BINSTAT2	Binary on Unregulated vs others	-.065	.181	0.556
BINETH1	Binary on Black homes vs others	-.060	-.171	0.403
BINETH2	Binary on White homes vs others	.052	.303	0.982
NCT012C	Number of children less than 12 months	-.068	-.006	0.005
NC1235C	Number of children 12-35 months	-.291	-.390	12.428*
NC3659C	Number of children 36-59 months	-.126	-.065	0.525
NC59PLC	Number of children 60+ months	-.044	.003	0.001
MACGAGE	Caregiver age in years	-.004	.065	0.268
MACGEXP	Caregiver experience in years	-.052	-.157	2.409
MACGEDUC	Caregiver education in years	-.082	-.091	0.878
CGCHILD	Caregiver's child is present	-.034	-.050	0.184
CGREL	Caregiver's relative is present	.017	.066	0.590
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.101	.087	.0700
AVGAGEC	Average age of children (in months) excluding infants	.018	-.153	1.209
RATEFEHC	Ratio of female children in home	.001	.006	0.005
RBLACK	Ratio of Black children in home	.030	.350	1.980
RWHITE	Ratio of White children in home	.076	-.061	0.049
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.014	.027	0.018
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.136	-.196	0.821
BS1E1	Interaction of San Antonio-Black homes vs others	-.105	-.152	1.005
BS1E2	Interaction of San Antonio-White homes vs others	-.151	-.086	0.239
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.019	-.081	0.375
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.038	-.180	1.129
BS2E1	Interaction of Philadelphia-Black homes vs others	.074	-.141	0.708
BST1E1	Interaction of Regulated-Black homes vs others	-.066	-.343	4.959*
BST1E2	Interaction of Regulated-White homes vs others	-.077	-.569	5.767*
BST2E1	Interaction of Unregulated-Black homes vs others	.003	-.009	0.003
BST2E2	Interaction of Unregulated-White homes vs others	-.044	-.167	0.526

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.341

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONVERSES - TOTAL"

(n = 296)

Dependent Variable: ABC15

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.063	-.011	0.007
BINSITE1	Binary on San Antonio vs others	-.325	-.396	5.454*
BINSITE2	Binary on Philadelphia vs others	.241	.049	0.123
BINSTAT1	Binary on Regulated vs others	-.023	-.031	0.033
BINSTAT2	Binary on Unregulated vs others	-.087	-.221	1.670
BINETH1	Binary on Black homes vs others	-.023	-.005	0.001
BINETH2	Binary on White homes vs others	.052	.214	1.107
NCTO12C	Number of children less than 12 months	-.076	-.072	1.527
NC1235C	Number of children 12-35 months	.015	-.033	0.229
NC3659C	Number of children 36-59 months	-.016	.036	0.297
NC59PLC	Number of children 60+ months	.198	.264	11.172*
MACGAGE	Caregiver age in years	-.062	-.054	0.419
MACGEXP	Caregiver experience in years	-.039	-.042	0.358
MACGEDUC	Caregiver education in years	-.008	-.068	0.963
CGCHILD	Caregiver's child is present	-.033	-.139	3.650
CGREL	Caregiver's relative is present	-.031	.018	0.090
STDAGEC	Standard deviation of child ages (in months) excluding infants	.043	.034	0.176
AVGAGEC	Average age of children (in months) excluding infants	.046	-.135	2.184
RATEFEMC	Ratio of female children in home	.087	.108	3.169
RBLACK	Ratio of Black children in home	.016	-.042	0.052
RWHITE	Ratio of White children in home	.032	-.116	0.580
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.137	.268	3.164
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.184	.355	4.873*
BS1E1	Interaction of San Antonio-Black homes vs others	-.215	-.095	0.757
BS1E2	Interaction of San Antonio-White homes vs others	-.183	-.212	2.938
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.080	-.007	0.001
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.107	.090	0.631
BS2E1	Interaction of Philadelphia-Black homes vs others	.162	.134	1.229
BST1E1	Interaction of Regulated-Black homes vs others	-.038	-.084	0.384
BST1E2	Interaction of Regulated-White homes vs others	-.004	-.002	0.000
BST2E1	Interaction of Unregulated-Black homes vs others	-.066	-.030	0.152
BST2E2	Interaction of Unregulated-White homes vs others	-.026	.087	0.306

*These F ratios are significant at $p < .05$.

For $p = .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.230$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER SUPERVISES AND PREPARES FOR CHILDREN"

(n = 296)

Dependent Variable: ABC16

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.013	-.222	2.626
BINSITE1	Binary on San Antonio vs others	-.129	.051	0.082
BINSITE2	Binary on Philadelphia vs others	-.048	-.230	2.516
BINSTAT1	Binary on Regulated vs others	.073	.077	0.183
BINSTAT2	Binary on Unregulated vs others	-.184	.078	0.192
BINETH1	Binary on Black homes vs others	.024	.044	0.041
BINETH2	Binary on White homes vs others	-.061	.352	2.727
NCT012C	Number of children less than 12 months	.003	.002	0.001
NC1235C	Number of children 12-35 months	.121	.120	2.718
NC3659C	Number of children 36-59 months	-.135	-.118	2.933
NC59PLC	Number of children 60+ months	.027	.057	0.466
MACGAGE	Caregiver age in years	.005	-.052	0.350
MACGEXP	Caregiver experience in years	-.058	-.096	1.715
MACGEDUC	Caregiver education in years	-.094	-.142	3.848
CGCHILD	Caregiver's child is present	-.063	-.055	0.512
CGREL	Caregiver's relative is present	-.035	.015	0.056
STDAGEC	Standard deviation of child ages (in months) excluding infants	.039	.067	0.643
AVGAGEC	Average age of children (in months) excluding infants	-.092	-.072	0.487
RATEFEMC	Ratio of female children in home	-.009	-.005	0.006
RBLACK	Ratio of Black children in home	.021	-.198	1.054
RWHITE	Ratio of White children in home	-.088	-.250	2.427
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.038	-.162	1.043
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.135	-.106	0.398
BS1E1	Interaction of San Antonio-Black homes vs others	-.088	-.022	0.038
BS1E2	Interaction of San Antonio-White homes vs others	-.085	-.012	0.009
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.040	-.021	0.036
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.141	.016	0.013
BS2E1	Interaction of Philadelphia-Black homes vs others	.051	.166	1.723
BST1E1	Interaction of Regulated-Black homes vs others	.097	.013	0.009
BST1E2	Interaction of Regulated-White homes vs others	.006	-.150	0.767
BST2E1	Interaction of Unregulated-Black homes vs others	-.121	-.167	1.553
BST2E2	Interaction of Unregulated-White homes vs others	-.156	-.330	4.013*

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.154$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONVERSES WITH ANOTHER ADULT"

(n = 296)

Dependent Variable: ABC17

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.083	-.023	0.027
BINSITE1	Binary on San Antonio vs others	-.045	-.010	0.003
BINSITE2	Binary on Philadelphia vs others	.028	.119	0.663
BINSTAT1	Binary on Regulated vs others	-.009	.041	0.050
BINSTAT2	Binary on Unregulated vs others	.038	.224	1.552
BINETH1	Binary on Black homes vs others	.102	.108	0.249
BINETH2	Binary on White homes vs others	-.037	-.049	0.053
NCT012C	Number of children less than 12 months	.149	.198	10.408*
NC1235C	Number of children 12-35 months	-.003	-.014	0.039
NC3659C	Number of children 36-59 months	-.009	-.000	0.000
NC59PLC	Number of children 60+ months	.077	.055	0.431
MACGAGE	Caregiver age in years	.110	.178	4.101*
MACGEXP	Caregiver experience in years	.068	.094	1.623
MACGEDUC	Caregiver education in years	.026	.059	0.648
CGCHILD	Caregiver's child is present	.044	.183	5.657*
CGREL	Caregiver's relative is present	.018	-.024	0.138
STDAGEC	Standard deviation of child ages (in months) excluding infants	.076	.058	0.475
AVGAGEC	Average age of children (in months) excluding infants	.047	-.007	0.004
RATEFEMC	Ratio of female children in home	.048	.026	0.182
RBLACK	Ratio of Black children in home	.107	.149	0.592
RWHITE	Ratio of White children in home	-.021	.072	0.197
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.085	-.071	0.198
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.044	-.107	0.399
BS1E1	Interaction of San Antonio-Black homes vs others	.077	-.022	0.036
BS1E2	Interaction of San Antonio-White homes vs others	-.054	.040	0.092
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.107	.159	2.027
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.053	-.214	3.208
BS2E1	Interaction of Philadelphia-Black homes vs others	.003	-.253	3.940*
BST1E1	Interaction of Regulated-Black homes vs others	.022	-.177	1.533
BST1E2	Interaction of Regulated-White homes vs others	-.003	-.103	0.354
BST2E1	Interaction of Unregulated-Black homes vs others	.099	.021	0.025
BST2E2	Interaction of Unregulated-White homes vs others	-.036	-.108	0.422

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.143$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER INVOLVED IN HOUSEKEEPING"

(n = 296)

Dependent Variable: ABC18

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.061	.108	0.714
BINSITE1	Binary on San Antonio vs others	-.158	-.306	3.390
BINSITE2	Binary on Philadelphia vs others	-.101	-.091	0.453
BINSTAT1	Binary on Regulated vs others	-.079	-.080	0.226
BINSTAT2	Binary on Unregulated vs others	.139	.239	2.043
BINETH1	Binary on Black homes vs others	-.155	-.158	0.624
BINETH2	Binary on White homes vs others	.083	-.173	0.747
NCT012C	Number of children less than 12 months	-.102	-.054	0.905
NC1235C	Number of children 12-35 months	-.213	-.142	4.362*
NC3659C	Number of children 36-59 months	-.176	-.226	12.351*
NC59PLC	Number of children 60+ months	.063	-.098	1.586
MACGAGE	Caregiver age in years	-.155	-.084	1.051
MACGEXP	Caregiver experience in years	-.093	.001	0.000
MACGEDUC	Caregiver education in years	.015	.038	0.311
CGCHILD	Caregiver's child is present	.158	.044	0.384
CGREL	Caregiver's relative is present	-.075	-.036	0.347
STDAGEC	Standard deviation of child ages (in months) excluding infants	.067	.010	0.017
AVGAGEC	Average age of children (in months) excluding infants	.147	.177	3.362
RATEFEMC	Ratio of female children in home	-.019	-.016	0.081
RBLACK	Ratio of Black children in home	-.126	.182	1.021
RWHITE	Ratio of White children in home	-.074	.112	0.561
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.091	.150	1.027
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.035	-.023	0.022
BS1E1	Interaction of San Antonio-Black homes vs others	-.188	-.065	0.368
BS1E2	Interaction of San Antonio-White homes vs others	-.042	-.103	0.714
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.150	-.199	3.664
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.021	-.086	0.595
BS2E1	Interaction of Philadelphia-Black homes vs others	-.102	.027	0.055
BST1E1	Interaction of Regulated-Black homes vs others	-.062	.201	2.294
BST1E2	Interaction of Regulated-White homes vs others	-.025	.286	3.168
BST2E1	Interaction of Unregulated-Black homes vs others	-.107	-.067	0.281
BST2E2	Interaction of Unregulated-White homes vs others	.165	.147	0.914

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.280

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER INVOLVED IN RECREATIONAL ACTIVITY"

(n = 296)

Dependent Variable: ABC19

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.091	.129	1.078
BINSITE1	Binary on San Antonio vs others	.092	-.255	2.498
BINSITE2	Binary on Philadelphia vs others	-.063	.047	0.126
BINSTAT1	Binary on Regulated vs others	-.136	.220	1.803
BINSTAT2	Binary on Unregulated vs others	.310	.096	0.349
BINETH1	Binary on Black homes vs others	.108	.117	0.365
BINETH2	Binary on White homes vs others	.010	.127	0.432
NCTO12C	Number of children less than 12 months	-.093	-.054	0.951
NC1235C	Number of children 12-35 months	-.258	-.193	8.521*
NC3659C	Number of children 36-59 months	-.083	-.068	1.172
NC59PLC	Number of children 60+ months	.007	-.041	0.298
MACGAGE	Caregiver age in years	.115	.067	0.717
MACGEXP	Caregiver experience in years	-.028	.001	0.000
MACGEDUC	Caregiver education in years	.041	.054	0.666
CGCHILD	Caregiver's child is present	-.052	-.033	0.221
CGREL	Caregiver's relative is present	.125	-.009	0.025
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.033	-.020	0.071
AVGAGEC	Average age of children (in months) excluding infants	.064	.043	0.210
RATEFEMC	Ratio of female children in home	.089	.077	1.977
RBLACK	Ratio of Black children in home	.110	.255	2.129
RWHITE	Ratio of White children in home	-.003	.077	0.280
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.102	.094	0.430
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.294	.246	2.603
BS1E1	Interaction of San Antonio-Black homes vs others	.276	.096	0.848
BS1E2	Interaction of San Antonio-White homes vs others	.010	.072	0.371
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.087	.058	0.331
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.093	.050	0.213
BS2E1	Interaction of Philadelphia-Black homes vs others	-.114	-.277	5.811*
BST1E1	Interaction of Regulated-Black homes vs others	-.090	-.171	1.760
BST1E2	Interaction of Regulated-White homes vs others	-.054	-.130	0.704
BST2E1	Interaction of Unregulated-Black homes vs others	.369	.203	2.794
BST2E2	Interaction of Unregulated-White homes vs others	.090	.019	0.015

[a] These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 =$ 0.305

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE VARIABLE, "CAREGIVER NOT INVOLVED (OUT OF RANGE OR ROOM)"

(n = 296)

Dependent Variable: ABC20

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.059	-.286	4.967*
BINSITE1	Binary on San Antonio vs others	-.189	-.164	0.971
BINSITE2	Binary on Philadelphia vs others	-.212	-.621	20.959*
BINSTAT1	Binary on Regulated vs others	.002	-.049	0.086
BINSTAT2	Binary on Unregulated vs others	-.058	.192	1.319
BINETH1	Binary on Black homes vs others	-.022	.130	0.423
BINETH2	Binary on White homes vs others	.036	.539	7.310*
NCTO12C	Number of children less than 12 months	.036	.053	0.855
NC1235C	Number of children 12-35 months	-.004	-.051	0.564
NC3659C	Number of children 36-59 months	-.045	-.022	0.115
NC59PLC	Number of children 60+ months	.019	-.003	0.001
MACGAGE	Caregiver age in years	.094	.084	1.050
MACGEXP	Caregiver experience in years	.035	.007	0.011
MACGEDUC	Caregiver education in years	.025	-.024	0.120
CGCHILD	Caregiver's child is present	-.061	.018	0.064
CGREL	Caregiver's relative is present	.079	.074	1.519
STDAGEC	Standard deviation of child ages (in months) excluding infants	.071	.110	1.978
AVGAGEC	Average age of children (in months) excluding infants	-.025	-.082	0.722
RATEFEMC	Ratio of female children in home	-.020	-.018	0.100
RBLACK	Ratio of Black children in home	-.016	-.171	0.902
RWHITE	Ratio of White children in home	-.025	-.318	4.506*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.023	.081	0.300
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.189	-.222	1.991
BS1E1	Interaction of San Antonio-Black homes vs others	-.058	-.104	0.949
BS1E2	Interaction of San Antonio-White homes vs others	-.097	-.091	0.563
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.104	.167	2.381
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.044	.111	1.007
BS2E1	Interaction of Philadelphia-Black homes vs others	-.121	.037	0.234
BST1E1	Interaction of Regulated-Black homes vs others	.011	-.062	0.216
BST1E2	Interaction of Regulated-White homes vs others	.001	-.277	2.979
BST2E1	Interaction of Unregulated-Black homes vs others	-.010	-.065	0.271
BST2E2	Interaction of Unregulated-White homes vs others	-.047	-.325	1.474*

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.262$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES PROSOCIAL BEHAVIOR WITH ANY CHILDREN"

(n = 296)

Dependent Variable: ABC21

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.136	-.142	1.170
BINSITE1	Binary on San Antonio vs others	-.074	.382	5.063*
BINSITE2	Binary on Philadelphia vs others	.268	.135	0.947
BINSTAT1	Binary on Regulated vs others	.025	-.032	0.035
BINSTAT2	Binary on Unregulated vs others	-.157	-.141	0.684
BINETH1	Binary on Black homes vs others	.082	.344	2.820
BINETH2	Binary on White homes vs others	.051	.274	1.802
NCT012C	Number of children less than 12 months	.022	-.055	0.893
NC1235C	Number of children 12-35 months	.246	.220	9.997*
NC3659C	Number of children 36-59 months	.122	.028	0.180
NC59PLC	Number of children 60+ months	-.123	-.106	1.786
MACCAGE	Caregiver age in years	-.076	.011	0.019
MACCEXP	Caregiver experience in years	.029	.030	0.188
MACCEDUC	Caregiver education in years	.121	.001	0.000
CGCHILD	Caregiver's child is present	.058	.086	1.389
CGREL	Caregiver's relative is present	-.110	-.021	0.116
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.075	-.058	0.522
AVGAGEC	Average age of children (in months) excluding infants	-.091	.095	0.922
RATEFEMC	Ratio of female children in home	.015	.042	0.519
RBLACK	Ratio of Black children in home	.064	-.222	1.449
RWHITE	Ratio of White children in home	.042	-.173	1.272
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.051	-.083	0.304
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.204	-.123	0.584
BS1E1	Interaction of San Antonio-Black homes vs others	-.105	-.127	1.345
BS1E2	Interaction of San Antonio-White homes vs others	-.007	-.079	0.411
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.067	-.023	0.046
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.169	.194	2.920
BS2E1	Interaction of Philadelphia-Black homes vs others	.188	.044	0.133
BST1E1	Interaction of Regulated-Black homes vs others	.031	-.093	0.473
BST1E2	Interaction of Regulated-White homes vs others	.020	-.086	0.275
BST2E1	Interaction of Unregulated-Black homes vs others	-.094	-.156	1.480
BST2E2	Interaction of Unregulated-White homes vs others	-.015	-.110	0.486

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.228$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES AFFECTION WITH ANY CHILDREN"

(n = 296)

Dependent Variable: ABC22

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.087	.097	0.512
BINSITE1	Binary on San Antonio vs others	.180	.016	0.008
BINSITE2	Binary on Philadelphia vs others	-.008	.142	0.972
BINSTAT1	Binary on Regulated vs others	.028	-.253	1.986
BINSTAT2	Binary on Unregulated vs others	.032	-.319	3.235
BINETH1	Binary on Black homes vs others	-.017	-.171	0.648
BINETH2	Binary on White homes vs others	-.034	-.131	0.381
NCT012C	Number of children less than 12 months	.040	-.021	0.117
NC1235C	Number of children 12-35 months	.128	.042	0.338
NC3659C	Number of children 36-59 months	-.142	-.081	1.401
NC59PLC	Number of children 60+ months	-.048	.105	1.644
MACGAGE	Caregiver age in years	-.002	-.132	2.310
MACGEXP	Caregiver experience in years	.024	.040	0.305
MACGEDUC	Caregiver education in years	-.106	-.097	1.832
CGCHILD	Caregiver's child is present	-.030	-.037	0.233
CGREL	Caregiver's relative is present	.111	.092	2.079
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.031	.097	1.374
AVGAGEC	Average age of children (in months) excluding infants	-.213	-.310	9.178*
RATEFEMC	Ratio of female children in home	-.024	-.020	0.112
RBLACK	Ratio of Black children in home	-.012	.092	0.231
RWHITE	Ratio of White children in home	-.036	.020	0.015
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.096	.135	0.736
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.127	.224	1.797
BS1E1	Interaction of San Antonio-Black homes vs others	.068	.037	0.104
BS1E2	Interaction of San Antonio-White homes vs others	.119	.067	0.270
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.061	.088	0.641
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.002	.076	0.420
BS2E1	Interaction of Philadelphia-Black homes vs others	-.011	-.126	0.996
BST1E1	Interaction of Regulated-Black homes vs others	.039	.184	1.706
BST1E2	Interaction of Regulated-White homes vs others	-.005	.140	0.676
BST2E1	Interaction of Unregulated-Black homes vs others	.018	.119	0.804
BST2E2	Interaction of Unregulated-White homes vs others	.023	.194	1.412

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.167$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES COMFORT WITH ANY CHILDREN

(n = 296)

Dependent Variable: ABC23

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.060	.010	0.005
BINSITE1	Binary on San Antonio vs others	.108	.052	0.081
BINSITE2	Binary on Philadelphia vs others	-.011	.053	0.129
BINSTAT1	Binary on Regulated vs others	-.022	-.301	2.658
BINSTAT2	Binary on Unregulated vs others	-.010	-.228	1.557
BINETH1	Binary on Black homes vs others	-.065	-.192	0.773
BINETH2	Binary on White homes vs others	.026	-.185	0.721
NCT012C	Number of children less than 12 months	-.005	-.056	0.812
NC1235C	Number of children 12-35 months	.144	.101	1.869
NC3659C	Number of children 36-59 months	-.061	-.031	0.197
NC59PLC	Number of children 60+ months	-.060	.015	0.031
MACGAGE	Caregiver age in years	-.055	-.048	0.293
MACGEXP	Caregiver experience in years	-.081	-.136	3.315
MACGEDUC	Caregiver education in years	.004	.015	0.039
CGCHILD	Caregiver's child is present	-.010	-.062	0.628
CGREL	Caregiver's relative is present	.068	.104	2.497
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.004	.126	2.165
AVGAGEC	Average age of children (in months) excluding infants	-.154	-.188	3.203
RATEFEMC	Ratio of female children in home	-.014	.001	0.000
RBLACK	Ratio of Black children in home	-.072	-.091	0.214
RWHITE	Ratio of White children in home	.021	.006	0.001
B51ST1	Interaction of San Antonio-Regulated homes vs others	.071	.037	0.052
B51ST2	Interaction of San Antonio-Unregulated homes vs others	.039	.062	0.130
B51E1	Interaction of San Antonio-Black homes vs others	-.006	.036	0.097
B51E2	Interaction of San Antonio-White homes vs others	.126	.120	0.938
B52ST1	Interaction of Philadelphia-Regulated homes vs others	-.003	-.005	0.002
B52ST2	Interaction of Philadelphia-Unregulated homes vs others	.002	.053	0.194
B52E1	Interaction of Philadelphia-Black homes vs others	.005	.095	0.533
BST1E1	Interaction of Regulated-Black homes vs others	-.066	.144	0.991
BST1E2	Interaction of Regulated-White homes vs others	.059	.243	1.936
BST2E1	Interaction of Unregulated-Black homes vs others	-.021	.063	0.210
BST2E2	Interaction of Unregulated-White homes vs others	.003	.089	0.282

Total R^2 = 0.121

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES LANGUAGE/INFORMATION WITH CHILD 1"

(n = 246)

Dependent Variable: ABC24

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.051	-.296	4.285*
BINSITE1	Binary on San Antonio vs others	.108	.422	4.974*
BINSITE2	Binary on Philadelphia vs others	.100	.433	6.865*
BINSTAT1	Binary on Regulated vs others	-.067	.223	1.239
BINSTAT2	Binary on Unregulated vs others	.086	.025	0.019
BINETH1	Binary on Black homes vs others	.031	.354	2.375
BINETH2	Binary on White homes vs others	-.018	.004	0.000
NCT012C	Number of children less than 12 months	-.026	.020	0.093
NC1235C	Number of children 12-35 months	-.129	-.151	4.466*
NC3659C	Number of children 36-59 months	-.262	-.163	4.961*
NC59PLC	Number of children 60+ months	-.080	.122	1.816
MACCAGE	Caregiver age in years	.079	.013	0.019
MACGEXP	Caregiver experience in years	.051	.033	0.178
MACGEDUC	Caregiver education in years	-.033	.021	0.078
CGCHILD	Caregiver's child is present	-.124	-.096	1.435
CGREL	Caregiver's relative is present	-.004	-.017	0.059
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.165	-.041	0.168
AVGAGEC	Average age of children (in months) excluding infants	-.160	-.184	2.180
RATEFEMC	Ratio of female children in home	-.004	.020	0.099
RBLACK	Ratio of Black children in home	-.019	-.614	9.088*
RWHITE	Ratio of White children in home	.027	-.160	0.884
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.056	-.206	1.344
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.187	.017	0.010
BS1E1	Interaction of San Antonio-Black homes vs others	.015	-.272	5.047*
BS1E2	Interaction of San Antonio-White homes vs others	.033	-.028	0.040
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.052	-.159	1.662
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.033	-.196	2.666
BS2E1	Interaction of Philadelphia-Black homes vs others	.080	-.109	0.605
BST1E1	Interaction of Regulated-Black homes vs others	.049	.049	0.100
BST1E2	Interaction of Regulated-White homes vs others	-.138	-.209	1.144
BST2E1	Interaction of Unregulated-Black homes vs others	.025	.122	0.741
BST2E2	Interaction of Unregulated-White homes vs others	.084	.059	0.125

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.250$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES LANGUAGE/INFORMATION WITH C2"

(n = 155)

Dependent Variable: ABC25

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.084	-.056	0.091
BINSITE1	Binary on San Antonio vs others	-.016	.353	2.186
BINSITE2	Binary on Philadelphia vs others	.218	.291	2.049
BINSTAT1	Binary on Regulated vs others	-.143	.139	0.348
BINSTAT2	Binary on Unregulated vs others	-.072	.159	0.385
BINETH1	Binary on Black homes vs others	.071	-.001	0.000
BINETH2	Binary on White homes vs others	.011	.250	0.598
NCT012C	Number of children less than 12 months	-.050	.020	0.030
NC1235C	Number of children 12-35 months	-.231	-.287	6.616*
NC3659C	Number of children 36-59 months	-.089	.019	0.041
NC59PLC	Number of children 60+ months	-.134	.022	0.033
MACGAGE	Caregiver age in years	.014	.030	0.051
MACGEXP	Caregiver experience in years	-.063	-.103	0.925
MACGEDUC	Caregiver education in years	.007	.014	0.018
CGCHILD	Caregiver's child is present	-.111	-.108	0.767
CGREL	Caregiver's relative is present	-.171	-.098	1.162
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.181	-.002	0.000
AVGAGEC	Average age of children (in months) excluding infants	-.024	-.154	1.099
RATEFEMC	Ratio of female children in home	-.148	-.165	3.409
RBLACK	Ratio of Black children in home	.064	.116	0.195
RWHITE	Ratio of White children in home	.009	-.044	0.049
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.078	-.185	0.775
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.016	-.197	0.741
BS1E1	Interaction of San Antonio-Black homes vs others	.033	.023	0.021
BS1E2	Interaction of San Antonio-White homes vs others	-.040	.066	0.123
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.064	-.023	0.026
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.049	-.123	0.171
BS2E1	Interaction of Philadelphia-Black homes vs others	.132	.074	0.175
BST1E1	Interaction of Regulated-Black homes vs others	.038	-.103	0.395
BST1E2	Interaction of Regulated-White homes vs others	-.145	-.351	1.939
BST2E1	Interaction of Unregulated-Black homes vs others	-.0[illegible]9	-.229	1.571
BST2E2	Interaction of Unregulated-White homes vs others	-.020	-.232	0.910

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.263$

Residual Degrees of Freedom = 122

45

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES LANGUAGE/INFORMATION - TOTAL"
(n = 296)

Dependent Variable: ABC26

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.087	-.172	1.808
BINSITE1	Binary on San Antonio vs others	.044	.755	20.759*
BINSITE2	Binary on Philadelphia vs others	.234	.341	6.330*
BINSTAT1	Binary on Regulated vs others	-.066	.049	0.084
BINSTAT2	Binary on Unregulated vs others	-.087	-.016	0.009
BINETH1	Binary on Black homes vs others	.039	.305	2.340
BINETH2	Binary on White homes vs others	.029	.020	0.010
NCT012C	Number of children less than 12 months	-.097	-.102	3.229
NC1235C	Number of children 12-35 months	-.003	-.068	1.014
NC3659C	Number of children 36-59 months	.102	.147	5.236*
NC59PLC	Number of children 60+ months	-.106	.030	0.146
MACGAGE	Caregiver age in years	-.076	.005	0.004
MACGEXP	Caregiver experience in years	-.014	-.015	0.048
MACGEDUC	Caregiver education in years	.070	.035	0.265
CGCHILD	Caregiver's child is present	.023	-.006	0.008
CGREL	Caregiver's relative is present	-.168	-.089	2.188
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.085	-.000	0.000
AVGAGEC	Average age of children (in months) excluding infants	-.036	-.122	1.602
RATEFEMC	Ratio of female children in home	-.086	-.089	2.521
RBLACK	Ratio of Black children in home	-.004	-.257	2.048
RWHITE	Ratio of White children in home	.069	-.018	0.014
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.057	-.356	5.841*
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.015	-.347	4.874*
BS1E1	Interaction of San Antonio-Black homes vs others	-.080	-.228	4.556*
BS1E2	Interaction of San Antonio-White homes vs others	.031	-.007	0.003
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.145	.064	0.383
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.014	-.123	1.225
BS2E1	Interaction of Philadelphia-Black homes vs others	.138	-.041	0.122
BST1E1	Interaction of Regulated-Black homes vs others	.030	-.088	0.439
BST1E2	Interaction of Regulated-White homes vs others	-.093	-.226	1.995
BST2E1	Interaction of Unregulated-Black homes vs others	-.126	-.062	0.247
BST2E2	Interaction of Unregulated-White homes vs others	.061	.018	0.013

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.265

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES STRUCTURED FINE MOTOR WITH CHILD 1"

(n = 246)

Dependent Variable: ABC27

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.079	.195	1.756
BINSITE1	Binary on San Antonio vs others	.046	-.040	0.042
BINSITE2	Binary on Philadelphia vs others	.117	.522	9.465*
BINSTAT1	Binary on Regulated vs others	-.090	-.057	0.077
BINSTAT2	Binary on Unregulated vs others	-.044	-.351	3.597
BINETH1	Binary on Black homes vs others	-.000	.362	2.353
BINETH2	Binary on White homes vs others	-.042	.016	0.005
NCTO12C	Number of children less than 12 months	-.064	-.002	0.001
NC1235C	Number of children 12-35 months	-.144	-.115	2.460
NC3659C	Number of children 36-59 months	-.170	-.095	1.597
NC59PLC	Number of children 60+ months	-.085	-.026	0.077
MACGAGE	Caregiver age in years	-.007	-.155	2.683
MACGEXP	Caregiver experience in years	-.025	-.001	0.000
MACGEDUC	Caregiver education in years	-.045	-.005	0.003
CGCHILD	Caregiver's child is present	-.129	-.162	3.873
CGREL	Caregiver's relative is present	.021	.037	0.274
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.157	-.151	2.138
AVGAGEC	Average age of children (in months) excluding infants	-.081	.075	0.345
RATEFEMC	Ratio of female children in home	.005	.009	0.016
RBLACK	Ratio of Black children in home	-.050	-.440	4.415*
RWHITE	Ratio of White children in home	-.006	.089	0.258
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.010	.163	0.794
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.061	.212	1.401
BS1E1	Interaction of San Antonio-Black homes vs others	.020	-.139	1.246
BS1E2	Interaction of San Antonio-White homes vs others	-.052	-.089	0.376
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.002	-.200	2.491
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.059	-.252	4.146*
BS2E1	Interaction of Philadelphia-Black homes vs others	.061	-.140	0.956
BST1E1	Interaction of Regulated-Black homes vs others	-.061	.132	0.698
BST1E2	Interaction of Regulated-White homes vs others	-.101	-.065	0.104
BST2E1	Interaction of Unregulated-Black homes vs others	.018	.354	5.916*
BST2E2	Interaction of Unregulated-White homes vs others	-.050	.196	1.291

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.207$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES STRUCTURED FINE MOTOR WITH CHILD 2"

(n = 155)

Dependent Variable: ABC28

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.034	.151	0.652
BINSITE1	Binary on San Antonio vs others	-.031	.045	0.036
BINSITE2	Binary on Philadelphia vs others	.205	.180	0.775
BINSTAT1	Binary on Regulated vs others	-.242	-.121	0.259
BINSTAT2	Binary on Unregulated vs others	.090	-.100	0.149
BINETH1	Binary on Black homes vs others	.035	-.210	0.534
BINETH2	Binary on White homes vs others	-.033	-.148	0.206
NCT012C	Number of children less than 12 months	.029	.060	0.445
NC1235C	Number of children 12-35 months	-.271	-.244	4.274*
NC3659C	Number of children 36-59 months	-.109	-.110	1.315
NC59PLC	Number of children 60+ months	.060	.014	0.013
MACGAGE	Caregiver age in years	-.049	-.079	0.344
MACGEXP	Caregiver experience in years	-.000	.040	0.139
MACGEDUC	Caregiver education in years	-.019	.046	0.196
CGCHILD	Caregiver's child is present	-.021	-.083	0.449
CGREL	Caregiver's relative is present	-.081	-.041	0.190
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.019	.049	0.199
AVGAGEC	Average age of children (in months) excluding infants	.146	.031	0.021
RATEFEMC	Ratio of female children in home	-.132	-.125	1.931
RBLACK	Ratio of Black children in home	.053	.186	0.492
RWHITE	Ratio of White children in home	-.031	.131	0.432
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.108	-.095	0.511
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.017	-.095	0.169
BS1E1	Interaction of San Antonio-Black homes vs others	.010	.106	0.431
BS1E2	Interaction of San Antonio-White homes vs others	-.007	.302	2.622
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.084	-.040	0.083
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.220	.212	1.392
BS2E1	Interaction of Philadelphia-Black homes vs others	.139	.013	0.005
BST1E1	Interaction of Regulated-Black homes vs others	-.099	.002	0.000
BST1E2	Interaction of Regulated-White homes vs others	-.150	-.091	0.129
BST2E1	Interaction of Unregulated-Black homes vs others	.159	.019	0.010
BST2E2	Interaction of Unregulated-White homes vs others	.013	-.102	0.173

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.252

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES STRUCTURED FINE MOTOR - TOTAL"

(n = 296)

Dependent Variable: **ABC29**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.112	.223	2.825
BINSITE1	Binary on San Antonio vs others	.031	.209	3.230
BINSITE2	Binary on Philadelphia vs others	.169	.241	2.938
BINSTAT1	Binary on Regulated vs others	-.166	-.266	2.318
BINSTAT2	Binary on Unregulated vs others	-.068	-.420	5.904*
BINETH1	Binary on Black homes vs others	-.040	.024	0.013
BINETH2	Binary on White homes vs others	-.021	-.152	0.542
NCT012C	Number of children less than 12 months	-.061	-.038	0.414
NC1235C	Number of children 12-35 months	-.093	-.066	0.892
NC3659C	Number of children 36-59 months	.039	.018	0.075
NC59PLC	Number of children 60+ months	.025	.012	0.022
MACGAGE	Caregiver age in years	-.135	-.188	4.941*
MACGEXP	Caregiver experience in years	-.024	.042	0.345
MACGEDUC	Caregiver education in years	-.013	.015	0.047
CGCHILD	Caregiver's child is present	-.005	-.098	1.765
CGREL	Caregiver's relative is present	-.087	-.012	0.035
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.015	-.017	0.043
AVGAGEC	Average age of children (in months) excluding infants	.088	.049	0.243
RATEFEMC	Ratio of female children in home	-.043	-.037	0.395
RBLACK	Ratio of Black children in home	-.077	-.139	0.558
RWHITE	Ratio of White children in home	.018	.184	1.417
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.029	-.126	0.678
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.058	-.110	0.460
BS1E1	Interaction of San Antonio-Black homes vs others	-.036	.011	0.010
BS1E2	Interaction of San Antonio-White homes vs others	-.035	-.016	0.017
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.048	-.089	0.684
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.093	.049	0.186
BS2E1	Interaction of Philadelphia-Black homes vs others	.102	.117	0.910
BST1E1	Interaction of Regulated-Black homes vs others	-.119	.114	0.684
BST1E2	Interaction of Regulated-White homes vs others	-.104	.039	0.127
BST2E1	Interaction of Unregulated-Black homes vs others	-.023	.173	1.781
BST2E2	Interaction of Unregulated-White homes vs others	-.016	.183	1.318

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.210

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES DRAMATIC PLAY - TOTAL"

(n = 296)

Dependent Variable: ABC30

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.047	-.005	0.002
BINSITE1	Binary on San Antonio vs others	.073	.275	2.365
BINSITE2	Binary on Philadelphia vs others	.111	-.082	0.313
BINSTAT1	Binary on Regulated vs others	-.065	.132	0.525
BINSTAT2	Binary on Unregulated vs others	.036	-.077	0.183
BINETH1	Binary on Black homes vs others	.048	.100	0.216
BINETH2	Binary on White homes vs others	.003	.210	0.958
NCT012C	Number of children less than 12 months	-.001	-.072	1.364
NC1235C	Number of children 12-35 months	.132	.119	2.640
NC3659C	Number of children 36-59 months	-.039	-.047	0.459
NC59PLC	Number of children 60+ months	-.064	.020	0.067
MACCAGE	Caregiver age in years	.047	-.044	0.255
MACCEXP	Caregiver experience in years	.123	.112	2.310
MACCEDUC	Caregiver education in years	.001	-.034	0.212
CGCHILD	Caregiver's child is present	-.102	-.084	1.200
CGREL	Caregiver's relative is present	.094	.120	3.396
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.076	-.026	0.099
AVGAGEC	Average age of children (in months) excluding infants	-.132	-.042	0.164
RATEFEMC	Ratio of female children in home	.003	.008	0.018
RBLACK	Ratio of Black children in home	.035	-.021	0.012
RWHITE	Ratio of White children in home	.015	.074	0.212
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.044	-.092	0.338
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.002	-.129	0.579
BS1E1	Interaction of San Antonio-Black homes vs others	.036	.084	0.529
BS1E2	Interaction of San Antonio-White homes vs others	.043	-.011	0.007
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.004	.060	0.287
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.123	.130	1.186
BS2E1	Interaction of Philadelphia-Black homes vs others	.141	.278	4.757[a]
BST1E1	Interaction of Regulated-Black homes vs others	-.063	-.024	2.880
BST1E2	Interaction of Regulated-White homes vs others	-.065	-.279	2.619
BST2E1	Interaction of Unregulated-Black homes vs others	.064	-.048	0.127
BST2E2	Interaction of Unregulated-White homes vs others	.064	.020	0.015

[a] These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.146

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES EXPLORATORY FINE MOTOR WITH ANY CHILDREN"

(n = 296)

Dependent Variable: ABC31

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.045	-.009	0.004
BINSITE1	Binary on San Antonio vs others	-.118	-.303	2.972
BINSITE2	Binary on Philadelphia vs others	-.040	-.411	8.193*
BINSTAT1	Binary on Regulated vs others	-.013	.025	0.019
BINSTAT2	Binary on Unregulated vs others	-.031	.324	3.355
BINETH1	Binary on Black homes vs others	-.101	.213	1.016
BINETH2	Binary on White homes vs others	.067	.346	2.684
NCTO12C	Number of children less than 12 months	-.041	-.050	0.678
NC1235C	Number of children 12 35 months	-.007	-.018	0.065
NC3659C	Number of children 36-59 months	-.083	-.048	0.494
NC59PLC	Number of children 60+ months	-.075	-.050	0.372
MACGAGE	Caregiver age in years	.072	.085	0.958
MACGEXP	Caregiver experience in years	.047	.015	0.041
MACGEDUC	Caregiver education in years	-.123	-.182	6.417*
CGCHILD	Caregiver's child is present	-.008	.076	1.005
CGREL	Caregiver's relative is present	.023	-.018	0.083
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.028	.048	0.337
AVGAGEC	Average age of children (in months) excluding infants	-.085	-.107	1.094
RATEFEMC	Ratio of female children in home	-.099	-.134	5.024*
RBLACK	Ratio of Black children in home	-.125	-.101	0.281
RWHITE	Ratio of White children in home	.065	.091	0.327
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.047	.010	0.004
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.093	-.041	0.060
BS1E1	Interaction of San Antonio-Black homes vs others	-.084	.211	3.475
BS1E2	Interaction of San Antonio-White homes vs others	-.024	.150	1.362
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.009	.216	3.889
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.001	.335	8.131*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.066	.099	0.625
BST1E1	Interaction of Regulated-Black homes vs others	-.003	-.149	1.118
BST1E2	Interaction of Regulated-White homes vs others	.029	-.278	2.893
BST2E1	Interaction of Unregulated-Black homes vs others	-.149	-.491	13.664*
BST2E2	Interaction of Unregulated-White homes vs others	-.018	-.546	11.232*

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.173$

Residual Degrees of Freedom = 283

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES WORK WITH CHILD 1"

(n = 246)

Dependent Variable: ABC32

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.108	-.015	0.012
BINSITE1	Binary on San Antonio vs others	.203	.447	5.879*
BINSITE2	Binary on Philadelphia vs others	.076	.533	11.018*
BINSTAT1	Binary on Regulated vs others	-.097	-.045	0.052
BINSTAT2	Binary on Unregulated vs others	.077	-.103	0.346
BINETH1	Binary on Black homes vs others	.004	.330	2.184
BINETH2	Binary on White homes vs others	-.090	-.070	0.105
NCT012C	Number of children less than 12 months	-.057	.008	0.016
NC1235C	Number of children 12-35 months	-.118	.010	0.022
NC3659C	Number of children 36-59 months	-.278	-.259	13.209*
NC59PLC	Number of children 60+ months	-.071	.013	0.021
MACCAGE	Caregiver age in years	.104	-.047	0.275
MACGEXP	Caregiver experience in years	.034	.021	0.076
MACGEDUC	Caregiver education in years	-.112	-.048	0.415
CGCHILD	Caregiver's child is present	-.133	-.043	0.301
CGREL	Caregiver's relative is present	.140	.097	2.137
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.205	-.259	7.018*
AVGAGEC	Average age of children (in months) excluding infants	-.095	.182	2.248
RATEFEMC	Ratio of female children in home	-.014	.003	0.002
RBLACK	Ratio of Black children in home	-.046	-.390	3.875
RWHITE	Ratio of White children in home	-.034	.040	0.059
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.000	-.038	0.049
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.211	.053	0.099
BS1E1	Interaction of San Antonio-Black homes vs others	.148	-.181	2.356
BS1E2	Interaction of San Antonio-White homes vs others	-.068	-.246	3.227
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.005	-.157	1.716
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.035	-.224	3.659
BS2E1	Interaction of Philadelphia-Black homes vs others	-.005	-.215	2.500
BST1E1	Interaction of Regulated-Black homes vs others	-.098	.092	0.379
BST1E2	Interaction of Regulated-White homes vs others	-.066	.136	0.513
BST2E1	Interaction of Unregulated-Black homes vs others	.124	.239	3.014
BST2E2	Interaction of Unregulated-White homes vs others	-.080	.093	0.323

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.289$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE "CAREGIVER FACILITATES WORK WITH CHILD 2"

(n = 155)

Dependent Variable: ABC33

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.095	-.223	1.761
BINSITE1	Binary on San Antonio vs others	.148	.358	2.750
BINSITE2	Binary on Philadelphia vs others	.054	.579	9.913*
BINSTAT1	Binary on Regulated vs others	-.109	.208	0.934
BINSTAT2	Binary on Unregulated vs others	.088	.256	1.223
BINETH1	Binary on Black homes vs others	.146	-.167	0.418
BINETH2	Binary on White homes vs others	-.052	.187	0.412
NCTO12C	Number of children less than 12 months	-.003	.094	1.332
NC1235C	Number of children 12-35 months	-.225	-.174	2.716
NC3659C	Number of children 36-59 months	-.074	-.020	0.054
NC59PLC	Number of children 60+ months	.036	.035	0.102
MACGAGE	Caregiver age in years	.065	.140	1.369
MACGEXP	Caregiver experience in years	-.077	-.077	0.634
MACGEDUC	Caregiver education in years	-.112	-.147	2.510
CGCHILD	Caregiver's child is present	.009	.135	1.476
CGREL	Caregiver's relative is present	-.070	-.105	1.622
STDAGEC	Standard deviation of child ages (in months) excluding infants	.026	.063	0.402
AVGAGEC	Average age of children (in months) excluding infants	.148	-.037	0.080
RATEFEMC	Ratio of female children in home	-.129	-.093	1.296
RBLACK	Ratio of Black children in home	.156	.197	0.893
RWHITE	Ratio of White children in home	-.090	-.266	2.225
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.033	-.255	1.804
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.205	-.255	1.515
BS1E1	Interaction of San Antonio-Black homes vs others	.370	.150	1.062
BS1E2	Interaction of San Antonio-White homes vs others	-.017	.133	0.630
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.037	-.117	0.864
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.079	-.420	6.784*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.050	-.448	7.824*
BST1E1	Interaction of Regulated-Black homes vs others	.042	.003	0.000
BST1E2	Interaction of Regulated-White homes vs others	-.111	-.249	1.206
BST2E1	Interaction of Unregulated-Black homes vs others	.258	.283	2.938
BST2E2	Interaction of Unregulated-White homes vs others	-.072	-.177	0.646

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.399

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES WORK - TOTAL"

(n = 296)

Dependent Variable: ABC34

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.014	-.143	1.212
BINSITE1	Binary on San Antonio vs others	.230	.790	22.063*
BINSITE2	Binary on Philadelphia vs others	.136	.526	14.678*
BINSTAT1	Binary on Regulated vs others	.003	-.020	0.014
BINSTAT2	Binary on Unregulated vs others	-.003	.012	0.005
BINETH1	Binary on Black homes vs others	.019	-.049	0.058
BINETH2	Binary on White homes vs others	-.012	.026	0.017
NCTO12C	Number of children less than 12 months	.059	.050	0.735
NC1235C	Number of children 12-35 months	.121	.235	11.623*
NC3659C	Number of children 36-59 months	.034	-.057	0.763
NC59PLC	Number of children 60+ months	.025	.006	0.007
MACGAGE	Caregiver age in years	-.041	-.033	0.153
MACGEXP	Caregiver experience in years	.025	.013	0.034
MACGEDUC	Caregiver education in years	-.087	-.131	3.658
CGCHILD	Caregiver's child is present	.064	.122	2.838
CGREL	Caregiver's relative is present	-.032	.003	0.002
STDAGEC	Standard deviation of child ages (in months) excluding infants	.020	-.056	0.501
AVGAGEC	Average age of children (in months) excluding infants	.035	.160	2.600
RATEFEMC	Ratio of female children in home	-.030	.002	0.001
RBLACK	Ratio of Black children in home	-.007	-.132	0.326
RWHITE	Ratio of White children in home	.011	-.099	0.423
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.079	-.352	5.556*
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.108	-.325	4.178*
BS1E1	Interaction of San Antonio-Black homes vs others	.121	-.031	0.081
BS1E2	Interaction of San Antonio-White homes vs others	.074	-.019	0.025
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.081	-.104	0.980
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.001	-.221	3.878
BS2E1	Interaction of Philadelphia-Black homes vs others	.053	-.122	1.031
BST1E1	Interaction of Regulated-Black homes vs others	-.034	.082	0.374
BST1E2	Interaction of Regulated-White homes vs others	.040	.016	0.080
BST2E1	Interaction of Unregulated-Black homes vs others	.093	.204	2.373
BST2E2	Interaction of Unregulated-White homes vs others	-.067	-.071	0.211

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.244

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES MUSIC/DANCE - TOTAL"

(n = 296)

Dependent Variable: ABC35

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.065	.180	1.828
BINSITE1	Binary on San Antonio vs others	-.020	.269	2.431
BINSITE2	Binary on Philadelphia vs others	.041	.018	0.017
BINSTAT1	Binary on Regulated vs others	-.102	-.336	3.669
BINSTAT2	Binary on Unregulated vs others	-.181	-.430	6.122*
BINETH1	Binary on Black homes vs others	-.027	-.157	0.572
BINETH2	Binary on White homes vs others	-.023	-.209	1.012
NCT012C	Number of children less than 12 months	-.137	-.131	4.882*
NC1235C	Number of children 12-35 months	.023	.048	0.461
NC3659C	Number of children 36-59 months	.087	.090	1.817
NC59PLC	Number of children 60+ months	-.139	-.083	1.054
MACGAGE	Caregiver age in years	-.034	-.128	2.265
MACGEXP	Caregiver experience in years	-.021	.039	0.307
MACGEDUC	Caregiver education in years	.063	.082	1.347
CGCHILD	Caregiver's child is present	-.089	-.096	1.673
CGREL	Caregiver's relative is present	-.030	.008	0.015
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.145	-.068	1.162
AVGAGEC	Average age of children (in months) excluding infants	-.071	.006	0.007
RATEFEMC	Ratio of female children in home	-.019	-.037	0.394
RBLACK	Ratio of Black children in home	-.039	.098	0.272
RWHITE	Ratio of White children in home	.002	.191	1.497
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.080	-.245	2.349
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.106	-.238	2.121
BS1E1	Interaction of San Antonio-Black homes vs others	.003	.018	0.026
BS1E2	Interaction of San Antonio-White homes vs others	-.070	.057	0.206
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.029	.106	0.966
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.067	-.011	0.010
BS2E1	Interaction of Philadelphia-Black homes vs others	-.014	-.047	0.146
BST1E1	Interaction of Regulated-Black homes vs others	-.065	.103	0.552
BST1E2	Interaction of Regulated-White homes vs others	-.032	.094	0.321
BST2E1	Interaction of Unregulated-Black homes vs others	-.037	.221	2.877
BST2E2	Interaction of Unregulated-White homes vs others	-.105	.135	0.707

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 =$ 0.202

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES GROSS MOTOR ACTIVITIES WITH ANY CHILDREN"

(n = 296)

Dependent Variable: ABC36

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.174	-.042	0.094
BINSITE1	Binary on San Antonio vs others	.148	.404	5.283*
BINSITE2	Binary on Philadelphia vs others	-.008	.099	0.478
BINSTAT1	Binary on Regulated vs others	-.024	.176	0.968
BINSTAT2	Binary on Unregulated vs others	-.098	.047	0.072
BINETH1	Binary on Black homes vs others	-.004	.048	0.050
BINETH2	Binary on White homes vs others	-.165	-.121	0.330
NCT012C	Number of children less than 12 months	-.088	-.100	2.733
NC1235C	Number of children 12-35 months	.112	.075	1.094
NC3659C	Number of children 36-59 months	-.027	.024	0.120
NC59PLC	Number of children 60+ months	-.090	-.024	0.085
MACGAGE	Caregiver age in years	.078	.127	2.165
MACGEXP	Caregiver experience in years	.024	-.027	0.141
MACGEDUC	Caregiver education in years	-.048	.070	0.094
CGCHILD	Caregiver's child is present	-.047	.040	0.278
CGREL	Caregiver's relative is present	-.026	-.025	0.156
STDAGEC	Standard deviation of child ages in months) excluding infants	-.011	.094	1.289
AVGAGEC	Average age of children (in months) excluding infants	-.131	-.137	1.80'
RATEFEMC	Ratio of female children in home	-.004	-.037	0.375
RBLACK	Ratio of Black children in home	-.038	-.140	0.539
RWHITE	Ratio of White children in home	-.115	-.016	0.011
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.099	-.189	1.459
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.030	-.239	2.061
BS1E1	Interaction of San Antonio-Black homes vs others	.011	.022	0.038
BS1E2	Interaction of San Antonio-White homes vs others	-.022	.064	0.250
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.040	.001	0.000
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.045	.011	0.009
BS2E1	Interaction of Philadelphia-Black homes vs others	.051	.100	0.630
BST1E1	Interaction of Regulated-Black homes vs others	-.090	-.306	4.764*
BST1E2	Interaction of Regulated-White homes vs others	-.073	-.240	2.003
BST2E1	Interaction of Unregulated-Black homes vs others	-.054	-.166	1.556
BST2E2	Interaction of Unregulated-White homes vs others	-.120	-.143	0.772

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.173

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES TV WITH ANY CHILDREN"

(n = 296)

Dependent Variable: ABC37

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.066	-.016	0.015
BINSITE1	Binary on San Antonio vs others	-.039	-.075	0.186
BINSITE2	Binary on Philadelphia vs others	.255	.278	3.786
BINSTAT1	Binary on Regulated vs others	.013	-.070	0.153
BINSTAT2	Binary on Unregulated vs others	.001	-.018	0.011
BINETH1	Binary on Black homes vs others	.033	.031	0.022
BINETH2	Binary on White homes vs others	.014	-.120	0.328
NCT012C	Number of children less than 12 months	-.132	-.153	6.313*
NC1235C	Number of children 12-35 months	-.099	-.044	0.383
NC3659C	Number of children 36-59 months	-.030	-.071	1.081
NC59PLC	Number of children 60+ months	-.045	-.093	1.312
MACGAGE	Caregiver age in years	.062	.072	0.699
MACGEXP	Caregiver experience in years	.017	-.050	0.477
MACGEDUC	Caregiver education in years	-.016	-.000	0.000
CGCHILD	Caregiver's child is present	-.092	-.079	1.110
CGREL	Caregiver's relative is present	-.004	-.018	0.082
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.079	-.093	1.276
AVGAGEC	Average age of children (in months) excluding infants	.061	.102	3.573
RATEFEMC	Ratio of female children in home	-.078	-.063	1.137
RBLACK	Ratio of Black children in home	.041	.060	0.099
RWHITE	Ratio of White children in home	.031	.073	0.216
BS1ST1	Interaction of San Antonic-Regulated homes vs others	-.008	.277	3.175
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.014	.199	1.440
BS1E1	Interaction of San Antonio-Black homes vs others	-.048	-.104	0.854
BS1E2	Interaction of San Antonio-White homes vs others	-.034	-.053	0.175
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.175	.184	1.995
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.081	.058	0.245
BS2E1	Interaction of Philadelphia-Black homes vs others	.130	-.100	0.639
BST1E1	Interaction of Regulated-Black homes vs others	-.031	-.064	0.210
BST1E2	Interaction of Regulated-White homes vs others	.061	.099	0.342
BST2E1	Interaction of Unregulated-Black homes vs others	.067	.021	0.026
BST2E2	Interaction of Unregulated-White homes vs others	-.067	-.010	0.004

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.180

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES PHYSICAL NEEDS WITH CHILD 1" (n = 246)

Dependent Variable: ABC38

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.217	.170	1.459
BINSITE1	Binary on San Antonio vs others	.158	-.086	0.214
BINSITE2	Binary on Philadelphia vs others	-.094	.210	1.664
BINSTAT1	Binary on Regulated vs others	-.060	-.246	1.542
BINSTAT2	Binary on Unregulated vs others	.049	-.096	0.294
BINETH1	Binary on Black homes vs others	-.008	.311	1.895
BINETH2	Binary on White homes vs others	-.104	.023	0.011
NCT012C	Number of children less than 12 months	-.115	-.060	0.889
NC1235C	Number of children 12-35 months	-.166	-.148	4.129*
NC3659C	Number of children 36-59 months	-.306	-.160	4.929*
NC59PLC	Number of children 60+ months	-.091	.106	1.420
MACGAGE	Caregiver age in years	.128	-.005	0.003
MACGEXP	Caregiver experience in years	.014	.008	0.010
MACGEDUC	Caregiver education in years	-.201	-.063	0.688
CGCHILD	Caregiver's child is present	-.099	-.005	0.004
CGREL	Caregiver's relative is present	.106	.031	0.211
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.055	.291	8.640*
AVGAGEC	Average age of children (in months) excluding infants	-.211	-.511	7.330*
RATEFEMC	Ratio of female children in home	.032	.009	0.022
RBLACK	Ratio of Black children in home	-.051	-.279	1.931
RWHITE	Ratio of White children in home	-.114	-.058	0.118
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.035	.202	1.320
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.166	.272	2.511
BS1E1	Interaction of San Antonio-Black homes vs others	.081	-.061	0.263
BS1E2	Interaction of San Antonio-White homes vs others	.048	.021	0.022
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.041	-.069	0.324
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.128	-.072	0.367
BS2E1	Interaction of Philadelphia-Black homes vs others	-.063	-.168	1.190
BST1E1	Interaction of Regulated-Black homes vs others	-.003	.168	1.219
BST1E2	Interaction of Regulated-White homes vs others	-.041	.191	0.985
BST2E1	Interaction of Unregulated-Black homes vs others	.031	.004	0.001
BST2E2	Interaction of Unregulated-White homes vs others	-.098	.004	0.001

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.271$

Residual Degrees of Freedom = 213

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES PHYSICAL NEEDS WITH CHILD 2"

(n = 155)

Dependent Variable: ABC39

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.152	-.033	0.031
BINSITE1	Binary on San Antonio vs others	.117	-.246	1.080
BINSITE2	Binary on Philadelphia vs others	-.101	-.029	0.021
BINSTAT1	Binary on Regulated vs others	-.057	-.130	0.308
BINSTAT2	Binary on Unregulated vs others	.055	-.233	0.843
BINETH1	Binary on Black homes vs others	-.057	-.116	0.168
BINETH2	Binary on White homes vs others	-.072	-.125	0.153
NCTO12C	Number of children less than 12 months	-.019	.067	0.564
NC1235C	Number of children 12-35 months	-.170	-.265	5.243*
NC3659C	Number of children 36-59 months	-.166	-.019	0.040
NC59PLC	Number of children 60+ months	-.153	.086	0.508
MACGAGE	Caregiver age in years	.120	.239	3.301
MACGEXP	Caregiver experience in years	-.138	-.187	3.106
MACGEDUC	Caregiver education in years	-.093	.020	0.040
CGCHILD	Caregiver's child is present	-.069	.115	0.899
CGREL	Caregiver's relative is present	.010	-.121	1.800
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.252	-.150	1.916
AVGAGEC	Average age of children (in months) excluding infants	-.163	-.336	5.352*
RATEFEMC	Ratio of female children in home	.011	-.014	0.024
RBLACK	Ratio of Black children in home	-.044	-.190	0.530
RWHITE	Ratio of White children in home	-.075	-.184	0.885
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.069	.149	0.513
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.225	.520	5.249*
BS1E1	Interaction of San Antonio-Black homes vs others	.113	.048	0.093
BS1E2	Interaction of San Antonio-White homes vs others	-.014	-.045	0.061
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.013	.065	0.223
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.083	.151	0.731
BS2E1	Interaction of Philadelphia-Black homes vs others	-.123	-.086	0.239
BST1E1	Interaction of Regulated-Black homes vs others	-.021	.035	0.048
BST1E2	Interaction of Regulated-White homes vs others	-.036	.144	0.335
BST2E1	Interaction of Unregulated-Black homes vs others	.011	.042	0.053
BST2E2	Interaction of Unregulated-White homes vs others	-.050	-.022	0.008

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/125)} = 3.92$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.277

Residual Degrees of Freedom = 122

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER FACILITATES PHYSICAL NEEDS - TOTAL"
(n = 296)

Dependent Variable: ABC40

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.171	.143	1.318
BINSITE1	Binary on San Antonio vs others	.164	.047	0.084
BINSITE2	Binary on Philadelphia vs others	-.103	-.035	0.070
BINSTAT1	Binary on Regulated vs others	.074	-.223	1.853
BINSTAT2	Binary on Unregulated vs others	-.053	-.213	1.724
BINETH1	Binary on Black homes vs others	-.033	.265	1.867
BINETH2	Binary on White homes vs others	-.054	.038	0.038
NCTO12C	Number of children less than 12 months	-.030	.089	2.564
NC1235C	Number of children 12-35 months	.301	.219	11.041*
NC3659C	Number of children 36-59 months	-.112	-.032	0.260
NC59PLC	Number of children 60+ months	-.072	.063	0.701
MACGAGE	Caregiver age in years	-.014	-.062	0.607
MACGEXP	Caregiver experience in years	.021	.016	0.057
MACGEDUC	Caregiver education in years	-.126	-.129	3.869
CGCHILD	Caregiver's child is present	.065	.104	2.269
CGREL	Caregiver's relative is present	.026	.021	0.132
STDAGEC	Standard deviation of child ages (in months) excluding infants	.042	.191	6.347*
AVGAGEC	Average age of children (in months) excluding infants	-.290	-.397	18.028*
RATEFEMC	Ratio of female children in home	.104	.099	3.245
RBLACK	Ratio of Black children in home	-.057	-.135	0.598
RWHITE	Ratio of White children in home	-.066	-.051	0.122
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.115	.047	0.106
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.058	.182	1.414
BS1E1	Interaction of San Antonio-Black homes vs others	-.046	-.101	0.950
BS1E2	Interaction of San Antonio-White homes vs others	.165	.081	0.470
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.032	.080	0.636
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.100	.045	0.174
BS2E1	Interaction of Philadelphia-Black homes vs others	-.012	-.066	0.327
BST1E1	Interaction of Regulated-Black homes vs others	-.001	.021	0.026
BST1E2	Interaction of Regulated-White homes vs others	.084	.188	1.459
BST2E1	Interaction of Unregulated-Black homes vs others	-.090	-.025	0.042
BST2E2	Interaction of Unregulated-White homes vs others	-.047	.051	0.118

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.305$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER INTERACTS WITH A BABY"

(n = 296)

Dependent Variable: ABC41

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.073	-.231	4.500*
BINSITE1	Binary on San Antonio vs others	.105	-.053	0.138
BINSITE2	Binary on Philadelphia vs others	-.122	-.267	5.333*
BINSTAT1	Binary on Regulated vs others	.175	-.132	0.840
BINSTAT2	Binary on Unregulated vs others	-.079	.033	0.053
BINETH1	Binary on Black homes vs others	-.036	-.147	0.744
BINETH2	Binary on White homes vs others	.048	-.281	2.746
NCT012C	Number of children less than 12 months	.577	.582	143.547*
NC1235C	Number of children 12-35 months	-.034	-.186	10.307*
NC3659C	Number of children 36-59 months	-.063	-.044	0.640
NC59PLC	Number of children 60+ months	-.068	-.028	0.183
MACCAGE	Caregiver age in years	-.056	-.051	0.533
MACCEXP	Caregiver experience in years	-.058	-.127	4.762*
MACCEDUC	Caregiver education in years	.080	.088	2.301
CGCHILD	Caregiver's child is present	-.008	-.038	0.383
CCREL	Caregiver's relative is present	-.026	.026	0.251
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.090	-.034	0.258
AVGAGEC	Average age of children (in months) excluding infants	-.101	-.020	0.062
RATEFEMC	Ratio of female children in home	.029	.059	1.490
RBLACK	Ratio of Black children in home	-.015	-.167	1.190
RWHITE	Ratio of White children in home	.062	-.012	0.009
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.230	.146	1.353
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.051	.013	0.010
BS1E1	Interaction of San Antonio-Black homes vs others	.008	-.026	0.081
BS1E2	Interaction of San Antonio-White homes vs others	.146	.017	0.028
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.008	.049	0.312
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.033	.050	0.280
BS2E1	Interaction of Philadelphia-Black homes vs others	-.015	.157	2.415
BST1E1	Interaction of Regulated-Black homes vs others	.018	.087	0.589
BST1E2	Interaction of Regulated-White homes vs others	.183	.237	3.007
BST2E1	Interaction of Unregulated-Black homes vs others	-.005	.002	0.000
BST2E2	Interaction of Unregulated-White homes vs others	-.065	-.088	0.454

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 =$ 0.465

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER INTERACTS WITH A SCHOOL-AGED CHILD"

(n = 296)

Dependent Variable: ABC42

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.010	-.088	0.429
BINSITE1	Binary on San Antonio vs others	.029	-.202	1.336
BINSITE2	Binary on Philadelphia vs others	-.103	-.122	0.733
BINSTAT1	Binary on Regulated vs others	.047	.003	0.000
BINSTAT2	Binary on Unregulated vs others	.015	-.296	2.843
BINETH1	Binary on Black homes vs others	-.015	-.320	2.319
BINETH2	Binary on White homes vs others	.053	-.501	5.717*
NCT012C	Number of children less than 12 months	-.040	-.023	0.150
NC1235C	Number of children 12-35 months	-.149	-.070	0.972
NC3659C	Number of children 36-59 months	.034	-.050	0.536
NC59PLC	Number of children 60+ months	.213	.028	0.122
MACGAGE	Caregiver age in years	-.148	-.033	0.152
MACGEXP	Caregiver experience in years	-.077	-.031	0.182
MACGEDUC	Caregiver education in years	.002	-.011	0.022
CGCHILD	Caregiver's child is present	.182	.121	2.621
CGREL	Caregiver's relative is present	-.080	-.036	0.316
STDAGEC	Standard deviation of child ages (in months) excluding infants	.176	-.008	0.009
AVGAGEC	Average age of children (in months) excluding infants	.281	.238	5.512*
RATEFEMC	Ratio of female children in home	-.039	-.005	0.007
RBLACK	Ratio of Black children in home	-.095	.106	0.315
RWHITE	Ratio of White children in home	.098	.177	1.259
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.032	.104	0.447
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.048	.131	0.626
BS1E1	Interaction of San Antonio-Black homes vs others	-.032	.047	0.173
BS1E2	Interaction of San Antonio-White homes vs others	.072	.073	0.329
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.013	.108	0.988
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.052	-.011	0.008
BS2E1	Interaction of Philadelphia-Black homes vs others	-.105	-.006	0.002
BST1E1	Interaction of Regulated-Black homes vs others	-.098	-.063	0.214
BST1E2	Interaction of Regulated-White homes vs others	.073	.128	0.501
BST2E1	Interaction of Unregulated-Black homes vs others	.014	.216	2.676
BST2E2	Interaction of Unregulated-White homes vs others	.061	.302	3.498

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.185$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER EXPRESSES POSITIVE AFFECT"

(n = 296)

Dependent Variable: ABC43

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.079	-.118	0.727
BINSITE1	Binary on San Antonio vs others	.011	.070	0.152
BINSITE2	Binary on Philadelphia vs others	.052	.052	0.126
BINSTAT1	Binary on Regulated vs others	.016	-.126	0.476
BINSTAT2	Binary on Unregulated vs others	-.081	-.063	0.120
BINETH1	Binary on Black homes vs others	.028	-.327	2.274
BINETH2	Binary on White homes vs others	-.132	-.244	1.275
NCT012C	Number of children less than 12 months	.201	.197	10.153*
NC1235C	Number of children 12-35 months	.051	-.016	0.048
NC3659C	Number of children 36-59 months	-.039	.028	0.158
NC59PLC	Number of children 60+ months	-.094	-.044	0.276
MACGAGE	Caregiver age in years	.087	.079	0.794
MACGEXP	Caregiver experience in years	-.010	-.090	1.493
MACGEDUC	Caregiver education in years	-.129	-.076	1.081
CGCHILD	Caregiver's child is present	-.107	-.066	0.729
CGREL	Caregiver's relative is present	-.046	-.072	1.217
STDAGEC	Standard deviation of child ages (in montns) excluding infants	-.054	.014	0.027
AVGAGEC	Average age of children (in months) excluding infants	-.101	-.047	0.199
RATEFEMC	Ratio of female children in home	-.032	-.046	0.570
RBLACK	Ratio of Black children in home	.047	-.016	0.007
RWHITE	Ratio of White children in home	-.134	-.165	1.031
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.038	-.038	0.057
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.081	-.152	0.800
BS1E1	Interaction of San Antonio-Black homes vs others	-.030	.034	0.087
BS1E2	Interaction of San Antonio-White homes vs others	-.019	.136	1.080
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.088	.117	1.097
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.010	.034	0.079
BS2E1	Interaction of Philadelphia-Black homes vs others	.095	.008	0.004
BST1E1	Interaction of Regulated-Black homes vs others	.066	.044	0.095
BST1E2	Interaction of Regulated-White homes vs others	-.070	-.015	0.008
BST2E1	Interaction of Unregulated-Black homes vs others	-.041	.025	0.034
BST2E2	Interaction of Unregulated-White homes vs others	-.060	.050	0.089

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.135$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER EXPRESSES NEGATIVE AFFECT"

(n = 296)

Dependent Variable: ABC44

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.151	.015	0.012
BINSITE1	Binary on San Antonio vs others	-.144	-.091	0.260
BINSITE2	Binary on Philadelphia vs others	.272	.421	8.330*
BINSTAT1	Binary on Regulated vs others	-.089	-.125	0.476
BINSTAT2	Binary on Unregulated vs others	.085	-.117	0.425
BINETH1	Binary on Black homes vs others	.059	-.102	0.224
BINETH2	Binary on White homes vs others	.083	-.138	0.404
NCT012C	Number of children less than 12 months	-.018	-.033	0.298
NC1235C	Number of children 12-35 months	.002	-.031	0.180
NC3659C	Number of children 36-59 months	.100	.081	1.360
NC59PLC	Number of children 60+ months	-.016	-.050	0.357
MACGAGE	Caregiver age in years	-.036	.008	0.009
MACGEXP	Caregiver experience in years	-.021	-.005	0.005
MACGEDUC	Caregiver education in years	.024	-.070	0.911
CGCHILD	Caregiver's child is present	.046	-.011	0.020
CGREL	Caregiver's relative is present	.025	.030	0.210
STDAGEC	Standard deviation of child ages (in months) excluding infants	.005	.087	1.066
AVGAGEC	Average age of children (in months) excluding infants	.023	-.035	0.112
RATEFEMC	Ratio of female children in home	.064	.070	1.342
RBLACK	Ratio of Black children in home	.086	.184	0.899
RWHITE	Ratio of White children in home	.072	.044	0.074
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.081	.105	0.442
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.069	.053	0.100
BS1E1	Interaction of San Antonio-Black homes vs others	-.014	.002	0.000
BS1E2	Interaction of San Antonio-White homes vs others	-.050	-.041	0.101
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.028	-.111	1.003
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.242	.004	0.001
BS2E1	Interaction of Philadelphia-Black homes vs others	.103	-.176	1.906
BST1E1	Interaction of Regulated-Black homes vs others	-.035	.044	0.097
BST1E2	Interaction of Regulated-White homes vs others	-.020	.193	1.254
BST2E1	Interaction of Unregulated-Black homes vs others	.080	.100	0.554
BST2E2	Interaction of Unregulated-White homes vs others	.127	.286	3.001

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.149$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONTROLS - TOTAL"

(n = 296)

Dependent Variable: ABC45

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.097	-.148	1.276
BINSITE1	Binary on San Antonio vs others	.135	.450	6.977*
BINSITE2	Binary on Philadelphia vs others	.093	.247	3.161
BINSTAT1	Binary on Regulated vs others	.057	-.128	0.549
BINSTAT2	Binary on Unregulated vs others	-.061	-.256	2.230
BINETH1	Binary on Black homes vs others	.007	-.021	0.011
BINETH2	Binary on White homes vs others	-.083	-.153	0.561
NCTO12C	Number of children less than 12 months	-.033	-.084	2.048
NC1235C	Number of children 12-35 months	.232	.250	12.891*
NC3659C	Number of children 36-59 months	.089	.036	0.301
NC59PLC	Number of children 60+ months	-.031	-.028	0.124
MACGAGE	Caregiver age in years	-.053	.010	0.013
MACGEXP	Caregiver experience in years	-.017	-.058	0.683
MACGEDUC	Caregiver education in years	-.094	-.100	2.071
CGCHILD	Caregiver's child is present	.111	.158	4.675*
CGREL	Caregiver's relative is present	.106	.164	7.031*
STDAGEC	Standard deviation of child ages (in months) excluding infants	.039	.014	0.030
AVGAGEC	Average age of children (in months) excluding infants	-.067	.029	0.083
RATEFEMC	Ratio of female children in home	.003	.039	0.456
RBLACK	Ratio of Black children in home	-.015	-.316	2.918
RWHITE	Ratio of White children in home	-.084	-.245	2.537
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.137	-.071	0.218
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.063	-.187	1.349
BS1E1	Interaction of San Antonio-Black homes vs others	-.009	-.097	0.782
BS1E2	Interaction of San Antonio-White homes vs others	.057	-.005	0.002
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.073	.007	0.005
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.053	-.052	0.212
BS2E1	Interaction of Philadelphia-Black homes vs others	.101	.044	0.132
BST1E1	Interaction of Regulated-Black homes vs others	-.033	.019	0.019
BST1E2	Interaction of Regulated-White homes vs others	.041	.162	0.973
BST2E1	Interaction of Unregulated-Black homes vs others	.014	.198	2.367
BST2E2	Interaction of Unregulated-White homes vs others	-.055	.206	1.702

[a] These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.223$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONTROLS DANGEROUS SITUATION"

(n = 296)

Dependent Variable: ABC46

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.007	-.250	3.227
BINSITE1	Binary on San Antonio vs others	-.004	.017	0.009
BINSITE2	Binary on Philadelphia vs others	.153	.303	4.230*
BINSTAT1	Binary on Regulated vs others	.001	.019	0.011
BINSTAT2	Binary on Unregulated vs others	-.083	-.097	0.286
BINETH1	Binary on Black homes vs others	-.029	.087	0.161
BINETH2	Binary on White homes vs others	.017	.112	0.271
NCT012C	Number of children less than 12 months	.016	-.003	0.002
NC1235C	Number of children 12-35 months	.064	.000	0.000
NC3659C	Number of children 36-59 months	-.049	-.012	0.031
NC59PLC	Number of children 60+ months	-.040	.089	1.115
MACGAGE	Caregiver age in years	.043	.104	1.388
MACGEXP	Caregiver experience in years	.020	-.038	0.265
MACGEDUC	Caregiver education in years	-.043	-.038	0.270
CGCHILD	Caregiver's child is present	-.031	.041	0.276
CGREL	Caregiver's relative is present	.073	.098	2.247
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.039	.045	0.285
AVGAGEC	Average age of children (in months) excluding infants	-.100	-.164	2.455
RATEFEMC	Ratio of female children in home	-.109	-.084	1.880
RBLACK	Ratio of Black children in home	-.051	-.392	4.017*
RWHITE	Ratio of White children in home	-.003	-.364	5.017*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.055	.128	0.642
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.054	.056	0.107
BS1E1	Interaction of San Antonio-Black homes vs others	-.024	.037	0.102
BS1E2	Interaction of San Antonio-White homes vs others	-.003	.058	0.198
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.082	.057	0.258
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.019	.019	0.025
BS2E1	Interaction of Philadelphia-Black homes vs others	.057	-.067	0.273
BST1E1	Interaction of Regulated-Black homes vs others	-.027	-.151	1.099
BST1E2	Interaction of Regulated-White homes vs others	-.019	-.196	1.269
BST2E1	Interaction of Unregulated-Black homes vs others	-.083	-.132	0.944
BST2E2	Interaction of Unregulated-White homes vs others	-.013	-.045	0.073

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/200)} = 3.89$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.132$

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER CONTROLS ANTISOCIAL SITUATION"

(n = 296)

Dependent Variable: ABC47

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.026	-.148	1.133
BINSITE1	Binary on San Antonio vs others	.028	.355	3.883
BINSITE2	Binary on Philadelphia vs others	.119	.273	3.456
BINSTAT1	Binary on Regulated vs others	.026	-.042	0.052
BINSTAT2	Binary on Unregulated vs others	-.079	-.039	0.045
BINETH1	Binary on Black homes vs others	.008	.325	2.246
BINETH2	Binary on White homes vs others	.017	-.143	0.441
NCT012C	Number of children less than 12 months	-.010	-.029	0.225
NC1235C	Number of children 12-35 months	.108	.119	2.616
NC3659C	Number of children 36-59 months	.051	.005	0.005
NC59PLC	Number of children 60+ months	.014	.083	0.993
MACGAGE	Caregiver age in years	-.129	-.120	1.848
MACGEXP	Caregiver experience in years	-.028	.031	0.176
MACGFDUC	Caregiver education in years	-.020	-.108	2.164
CGCHILD	Caregiver's child is present	.118	.092	1.429
CGREL	Caregiver's relative is present	-.001	.077	1.388
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.018	-.084	0.973
AVGAGEC	Average age of children (in months) excluding infants	-.020	.006	0.003
RATEFEMC	Ratio of female children in home	-.015	.003	0.003
RBLACK	Ratio of Black children in home	-.031	-.317	2.643
RWHITE	Ratio of White children in home	.038	-.073	0.204
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.059	-.065	0.166
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.084	-.224	1.724
BS1E1	Interaction of San Antonio-Black homes vs others	.009	-.016	0.019
BS1E2	Interaction of San Antonio-White homes vs others	-.011	-.135	1.064
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.061	-.037	0.108
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.005	-.163	1.829
BS2E1	Interaction of Philadelphia-Black homes vs others	.055	-.046	0.131
BST1E1	Interaction of Regulated-Black homes vs others	-.040	-.100	0.481
BST1E2	Interaction of Regulated-White homes vs others	.046	.176	1.031
BST2E1	Interaction of Unregulated-Black homes vs others	-.093	-.062	0.208
BST2E2	Interaction of Unregulated-White homes vs others	.022	.217	1.697

Total R^2 = 0.134

Residual Degrees of Freedom = 263

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE DEPENDENT VARIABLE, "CAREGIVER STRICTLY CONTROLS ANY CHILDREN"

(n = 296)

Dependent Variable: ABC48

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.019	.073	0.273
BINSITE1	Binary on San Antonio vs others	.145	.077	0.184
BINSITE2	Binary on Philadelphia vs others	.067	.181	1.518
BINSTAT1	Binary on Regulated vs others	-.009	-.107	0.344
BINSTAT2	Binary on Unregulated vs others	.093	-.070	0.148
BINETH1	Binary on Black homes vs others	-.005	.263	1.475
BINETH2	Binary on White homes vs others	.069	-.037	0.030
NCT012C	Number of children less than 12 months	.017	-.021	0.119
NC1235C	Number of children 12-35 months	.079	.072	0.963
NC3659C	Number of children 36-59 months	.096	.098	1.967
NC59PLC	Number of children 60+ months	-.077	-.030	0.132
MACGAGE	Caregiver age in years	-.041	-.092	1.078
MACGEXP	Caregiver experience in years	.078	.086	1.348
MACGEDUC	Caregiver education in years	-.027	-.091	1.541
CGCHILD	Caregiver's child is present	.051	.046	0.357
CGREL	Caregiver's relative is present	.103	.084	1.637
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.051	-.024	0.083
AVGAGEC	Average age of children (in months) excluding infants	-.081	-.086	0.671
RATEFEMC	Ratio of female children in home	-.032	-.016	0.072
RBLACK	Ratio of Black children in home	-.030	-.178	0.828
RWHITE	Ratio of White children in home	.065	.053	0.109
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.121	.123	0.388
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.086	.013	0.006
BS1E1	Interaction of San Antonio-Black homes vs others	.064	-.033	0.083
BS1E2	Interaction of San Antonio-White homes vs others	.143	.015	0.013
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.012	.008	0.005
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.110	-.043	0.130
BS2E1	Interaction of Philadelphia-Black homes vs others	.023	-.064	0.246
BST1E1	Interaction of Regulated-Black homes vs others	-.114	-.046	0.104
BST1E2	Interaction of Regulated-White homes vs others	.095	.110	0.630
BST2E1	Interaction of Unregulated-Black homes vs others	.136	.209	2.368
BST2E2	Interaction of Unregulated-White homes vs others	.046	.150	0.813

Total R^2 = 0.134

Residual Degrees of Freedom = 263

STRUCTURED SITUATIONS

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER TEACHES - TOTAL" (n = 210)

Dependent Variable: SABC03

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.023	-.224	2.284
BINSITE1	Binary on San Antonio vs others	.239	.839	21.493*
BINSITE2	Binary on Philadelphia vs others	.014	.036	0.048
BINSTAT1	Binary on Regulated vs others	.137	-.339	1.791
BINSTAT2	Binary on Unregulated vs others	-.140	-.021	0.014
BINETH1	Binary on Black homes vs others	.084	.564	5.331*
BINETH2	Binary on White homes vs others	.001	.235	1.034
NCT012C	Number of children less than 12 months	-.009	-.081	1.231
NC1235C	Number of children 12-35 months	.193	.131	2.520
NC3659C	Number of children 36-59 months	.001	-.123	2.572
NC59PLC	Number of children 60+ months	-.181	-.092	0.855
MACGAGE	Caregiver age in years	.029	.034	0.125
MACGEXP	Caregiver experience in years	.093	-.084	1.048
MACGEDUC	Caregiver education in years	.044	-.008	0.009
CGCHILD	Caregiver's child is present	.063	.205	5.669*
CGREL	Caregiver's relative is present	.031	.130	3.425
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.093	-.076	0.616
AVGAGEC	Average age of children (in months) excluding infants	-.180	.046	0.149
RATEFEMC	Ratio of female children in home	.117	.125	3.233
RBLACK	Ratio of Black children in home	.020	-.269	1.588
RWHITE	Ratio of White children in home	-.001	-.202	1.453
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.166	-.022	0.012
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.019	-.247	2.016
BS1E1	Interaction of San Antonio-Black homes vs others	.079	-.201	2.414
BS1E2	Interaction of San Antonio-White homes vs others	.110	-.332	3.951*
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.085	.115	0.734
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.093	.005	0.002
BS2E1	Interaction of Philadelphia-Black homes vs others	.049	-.019	0.016
BST1E1	Interaction of Regulated-Black homes vs others	.050	.066	0.129
BST1E2	Interaction of Regulated-White homes vs others	.131	.304	2.214
BST2E1	Interaction of Unregulated-Black homes vs others	-.140	-.273	4.556*
BST2E2	Interaction of Unregulated-White homes vs others	-.044	.030	0.027

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.324$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER PLAYS/PARTICIPATES - TOTAL"

(n = 210)

Dependent Variable: SABC06

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.168	.041	0.092
BINSITE1	Binary on San Antonio vs others	-.397	-.372	5.049*
BINSITE2	Binary on Philadelphia vs others	.535	.586	15.631*
BINSTAT1	Binary on Regulated vs others	.020	.076	0.109
BINSTAT2	Binary on Unregulated vs others	-.150	-.117	0.532
BINETH1	Binary on Black homes vs others	.084	-.242	1.170
BINETH2	Binary on White homes vs others	.032	-.033	0.025
NCT012C	Number of children less than 12 months	-.051	-.131	3.807
NC1235C	Number of children 12-35 months	-.059	-.145	3.693
NC3659C	Number of children 36-59 months	-.038	-.015	0.045
NC59PLC	**Number of children 60+ months**	-.052	.042	0.212
MACGAGE	Caregiver age in years	-.095	-.131	2.151
MACGEXP	Caregiver experience in years	-.075	.013	0.028
MACGEDUC	Caregiver education in years	-.033	-.128	2.811
CGCHILD	**Caregiver's child is present**	-.054	-.129	2.681
CGREL	**Caregiver's relative is present**	-.079	-.041	0.419
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.139	.023	0.068
AVGAGEC	**Average age of children (in months) excluding infants**	-.089	-.220	4.020*
RATEFEMC	Ratio of female children in home	-.092	-.153	5.755*
RBLACK	Ratio of Black children in home	.136	-.026	0.018
RWHITE	Ratio of White children in home	.037	.116	0.567
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.162	-.146	0.596
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.242	.145	0.833
BS1E1	Interaction of San Antonio-Black homes vs others	-.154	.085	0.517
BS1E2	Interaction of San Antonio-White homes vs others	-.242	.017	0.013
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.263	-.091	0.550
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.196	-.031	0.096
BS2E1	Interaction of Philadelphia-Black homes vs others	.308	-.028	0.043
BST1E1	Interaction of Regulated-Black homes vs others	.123	.158	0.869
BST1E2	Interaction of Regulated-White homes vs others	-.045	-.081	0.187
BST2E1	Interaction of Unregulated-Black homes vs others	-.012	.138	1.393
BST2E2	Interaction of Unregulated-White homes vs others	-.108	-.049	0.089

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.435$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER HELPS - TOTAL"

(n = 210)

Dependent Variable: SA[illegible]C09

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.195	-.059	0.198
BINSITE1	Binary on San Antonio vs others	.578	.667	17.092*
BINSITE2	Binary on Philadelphia vs others	-.133	.019	0.017
BINSTAT1	Binary on Regulated vs others	.106	-.001	0.000
BINSTAT2	Binary on Unregulated vs others	.068	-.220	1.969
BINETH1	Binary on Black homes vs others	-.075	.289	1.760
BINETH2	Binary on White homes vs others	-.024	.256	1.549
NCT012C	Number of children less than 12 months	.082	.008	0.015
NC1235C	Number of children 12-35 months	-.075	-.141	3.673
NC3659C	Number of children 36-59 months	.083	.039	0.323
NC59PLC	**Number of children 60+ months**	-.049	.033	0.141
MACGAGE	Caregiver age in years	-.025	-.117	1.814
MACGEXP	Caregiver experience in years	.051	-.019	0.071
MACGEDUC	Caregiver education in years	-.146	-.119	2.556
CGCHILD	**Caregiver's child is present**	.024	.007	0.008
CGREL	**Caregiver's relative is present**	.133	.139	4.931*
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.015	-.043	0.275
AVGAGEC	**Average age of children (in months) excluding infants**	.003	-.094	0.763
RATEFEMC	Ratio of female children in home	.073	.121	3.801
RBLACK	Ratio of Black children in home	-.125	-.187	0.969
RWHITE	Ratio of White children in home	-.024	-.272	3.299
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.335	.173	0.883
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.303	.200	1.668
BS1E1	Interaction of San Antonio-Black homes vs others	.195	-.116	1.007
BS1E2	Interaction of San Antonio-White homes vs others	.272	-.199	1.795
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.071	.133	1.232
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.015	.202	4.196*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.087	.003	0.001
BST1E1	Interaction of Regulated-Black homes vs others	-.103	-.101	0.375
BST1E2	Interaction of Regulated-White homes vs others	.087	-.014	0.006
BST2E1	Interaction of Unregulated-Black homes vs others	.057	-.048	0.178
BST2E2	Interaction of Unregulated-White homes vs others	.023	.118	0.538

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.463$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER DIRECTS - TOTAL"

(n = 210)

Dependent Variable: SABC12

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.137	-.014	0.008
BINSITE1	Binary on San Antonio vs others	.301	.529	7.674*
BINSITE2	Binary on Philadelphia vs others	-.175	-.228	1.782
BINSTAT1	Binary on Regulated vs others	-.032	-.309	1.334
BINSTAT2	Binary on Unregulated vs others	.021	-.092	0.244
BINETH1	Binary on Black homes vs others	-.006	.450	3.053
BINETH2	Binary on White homes vs others	-.079	.104	0.181
NCT012C	Number of children less than 12 months	-.035	-.015	0.035
NC1235C	Number of children 12-35 months	.113	.137	2.485
NC3659C	Number of children 36-59 months	-.010	.005	0.003
NC59PLC	**Number of children 60+ months**	-.026	.132	1.561
MACGAGE	Caregiver age in years	.039	.073	0.507
MACGEXP	Caregiver experience in years	.031	.057	0.443
MACGEDUC	Caregiver education in years	-.022	-.017	0.039
CGCHILD	**Caregiver's child is present**	.089	.233	6.567*
CGREL	**Caregiver's relative is present**	.040	-.020	0.076
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.066	-.172	2.879
AVGAGEC	**Average age of children (in months) excluding infants**	-.084	-.063	0.245
RATEFEMC	Ratio of female children in home	.078	.060	0.660
RBLACK	Ratio of Black children in home	-.070	-.246	1.191
RWHITE	Ratio of White children in home	-.035	.040	0.050
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.038	-.096	0.195
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.199	.031	0.029
BS1E1	Interaction of San Antonio-Black homes vs others	.171	-.140	1.043
BS1E2	Interaction of San Antonio-White homes vs others	.061	-.247	1.960
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.043	.205	2.105
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.107	.076	0.419
BS2E1	Interaction of Philadelphia-Black homes vs others	-.117	-.040	0.069
BST1E1	Interaction of Regulated-Black homes vs others	-.105	-.029	0.022
BST1E2	Interaction of Regulated-White homes vs others	.053	-.164	0.576
BST2E1	Interaction of Unregulated-Black homes vs others	.096	.025	0.035
BST2E2	Interaction of Unregulated-White homes vs others	-.098	-.130	0.467

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.247$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER CONVERSES - TOTAL"

(n = 210)

Dependent Variable: SABC15

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.129	-.034	0.046
BINSITE1	Binary on San Antonio vs others	-.104	.063	0.108
BINSITE2	Binary on Philadelphia vs others	-.001	.077	0.198
BINSTAT1	Binary on Regulated vs others	-.069	-.224	0.688
BINSTAT2	Binary on Unregulated vs others	.050	.012	0.004
BINETH1	Binary on Black homes vs others	.045	-.129	0.247
BINETH2	Binary on White homes vs others	.149	.052	0.045
NCTO12C	Number of children less than 12 months	-.133	-.066	0.717
NC1235C	Number of children 12-35 months	-.122	-.106	1.468
NC3659C	Number of children 36-59 months	.127	.159	3.794
NC59PLC	**Number of children 60+ months**	.177	.209	3.836
MACGAGE	Caregiver age in years	-.080	.097	0.873
MACGEXP	Caregiver experience in years	-.090	-.083	0.919
MACGEDUC	Caregiver education in years	.144	.099	1.245
CGCHILD	**Caregiver's child is present**	.118	.072	0.620
CGREL	**Caregiver's relative is present**	.015	.039	0.279
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	.101	.120	1.374
AVGAGEC	**Average age of children (in months) excluding infants**	.120	-.172	1.797
RATEFEMC	Ratio of female children in home	.100	.058	0.615
RBLACK	Ratio of Black children in home	-.041	.033	0.021
RWHITE	Ratio of White children in home	.173	.176	0.949
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.086	.115	0.274
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.005	.064	0.118
BS1E1	Interaction of San Antonio-Black homes vs others	.000	-.064	0.215
BS1E2	Interaction of San Antonio-White homes vs others	-.071	-.043	6.194*
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.068	-.262	3.350
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.107	-.348	8.697*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.032	.245	2.489
BST1E1	Interaction of Regulated-Black homes vs others	-.075	.235	1.424
BST1E2	Interaction of Regulated-White homes vs others	.024	.321	2.170
BST2E1	**Interaction of Unregulated-Black homes vs others**	-.017	.107	0.618
BST2E2	**Interaction of Unregulated-White homes vs others**	.093	.212	1.211

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.232

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES PROSOCIAL BEHAVIOR WITH ANY CHILDREN"

(n = 210)

Dependent Variable: SABC21

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.163	-.306	3.773
BINSITE1	Binary on San Antonio vs others	.102	.237	1.515
BINSITE2	Binary on Philadelphia vs others	.096	.091	0.279
BINSTAT1	Binary on Regulated vs others	.064	.010	0.002
BINSTAT2	Binary on Unregulated vs others	.016	-.100	0.282
BINETH1	Binary on Black homes vs others	-.122	-.154	0.351
BINETH2	Binary on White homes vs others	.244	.008	0.001
NCT012C	Number of children less than 12 months	-.042	-.111	2.019
NC1235C	Number of children 12-35 months	.064	.099	1.276
NC3659C	Number of children 36-59 months	.290	.187	5.265*
NC59PLC	**Number of children 60+ months**	-.054	-.067	0.393
MACGAGE	Caregiver age in years	-.108	-.014	0.018
MACGEXP	Caregiver experience in years	.037	.033	0.142
MACGEDUC	Caregiver education in years	.161	.013	0.022
CGCHILD	**Caregiver's child is present**	.131	.070	0.590
CGREL	**Caregiver's relative is present**	.010	.106	2.020
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.004	.003	0.001
AVGAGEC	**Average age of children (in months) excluding infants**	.046	.070	0.301
RATEFEMC	Ratio of female children in home	.038	.115	2.408
RBLACK	Ratio of Black children in home	-.107	-.026	0.014
RWHITE	Ratio of White children in home	.217	-.200	1.255
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.091	-.048	0.048
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.027	-.027	0.021
BS1E1	Interaction of San Antonio-Black homes vs others	-.040	.028	0.041
BS1E2	Interaction of San Antonio-White homes vs others	.184	.084	0.222
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.054	.119	0.691
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.143	.195	2.727
BS2E1	Interaction of Philadelphia-Black homes vs others	-.062	-.088	0.324
BST1E1	Interaction of Regulated-Black homes vs others	-.094	-.103	0.271
BST1E2	Interaction of Regulated-White homes vs others	.165	-.009	0.002
BST2E1	Interaction of Unregulated-Black homes vs others	-.084	-.124	0.823
BST2E2	Interaction of Unregulated-White homes vs others	.171	.079	0.170

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.234

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES AFFECTION WITH ANY CHILDREN"
(n = 210)

Dependent Variable: SABC22

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.025	-.103	0.395
BINSITE1	Binary on San Antonio vs others	.045	-.213	1.134
BINSITE2	Binary on Philadelphia vs others	-.134	-.302	2.833
BINSTAT1	Binary on Regulated vs others	.010	-.346	1.520
BINSTAT2	Binary on Unregulated vs others	-.040	-.319	2.679
BINETH1	Binary on Black homes vs others	-.072	-.037	0.019
BINETH2	Binary on White homes vs others	.061	.460	3.241
NCT012C	Number of children less than 12 months	.092	.040	0.241
NC1235C	Number of children 12-35 months	.120	.071	0.611
NC3659C	Number of children 36-59 months	-.086	-.033	0.147
NC59PLC	Number of children 60+ months	.021	.044	0.155
MACGAGE	Caregiver age in years	-.014	-.129	1.416
MACGEXP	Caregiver experience in years	.056	.081	0.794
MACGEDUC	Caregiver education in years	-.106	-.213	5.320*
CGCHILD	Caregiver's child is present	-.043	-.069	0.520
CGREL	Caregiver's relative is present	-.065	-.083	1.158
STDAGEC	Standard deviation of child ages (in months) excluding infants	.074	.162	2.317
AVGAGEC	Average age of children (in months) excluding infants	-.096	-.222	2.770
RATEFEMC	Ratio of female children in home	-.041	.002	0.001
RBLACK	Ratio of Black children in home	-.068	-.078	0.109
RWHITE	Ratio of White children in home	-.015	-.336	3.266
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.061	.285	1.546
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.019	.382	3.930*
BS1E1	Interaction of San Antonio-Black homes vs others	-.010	.055	0.148
BS1E2	Interaction of San Antonio-White homes vs others	.098	-.179	0.940
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.068	.052	0.123
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.054	.168	1.883
BS2E1	Interaction of Philadelphia-Black homes vs others	-.067	.080	0.246
BST1E1	Interaction of Regulated-Black homes vs others	.029	.147	0.517
BST1E2	Interaction of Regulated-White homes vs others	.013	.070	0.097
BST2E1	Interaction of Unregulated-Black homes vs others	-.109	-.090	0.408
BST2E2	Interaction of Unregulated-White homes vs others	.048	.051	0.066

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.414

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES COMFORT WITH ANY CHILDREN"

(n = 210)

Dependent Variable: SABC23

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.041	.036	0.051
BINSITE1	Binary on San Antonio vs others	-.045	.180	0.850
BINSITE2	Binary on Philadelphia vs others	.093	.077	0.192
BINSTAT1	Binary on Regulated vs others	-.050	.132	0.234
BINSTAT2	Binary on Unregulated vs others	.112	.171	0.816
BINETH1	Binary on Black homes vs others	-.031	-.454	2.973
BINETH2	Binary on White homes vs others	.031	.361	2.104
NCT012C	Number of children less than 12 months	-.062	-.067	0.713
NC1235C	Number of children 12-35 months	-.072	-.069	0.596
NC3659C	Number of children 36-59 months	-.032	-.104	1.597
NC59PLC	**Number of children 60+ months**	.052	-.047	0.192
MACGAGE	Caregiver age in years	-.091	-.043	0.166
MACGEXP	Caregiver experience in years	-.099	-.072	0.665
MACGEDUC	Caregiver education in years	-.009	-.050	0.308
CGCHILD	**Caregiver's child is present**	.116	.049	0.282
CGREL	**Caregiver's relative is present**	-.039	-.032	0.179
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	.056	.103	0.983
AVGAGEC	**Average age of children (in months) excluding infants**	.038	.061	0.223
RATEFEMC	Ratio of female children in home	.116	.128	2.920
RBLACK	Ratio of Black children in home	.017	.656	8.117*
RWHITE	Ratio of White children in home	-.029	-.293	2.618
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.009	-.081	0.133
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.059	-.197	1.103
BS1E1	Interaction of San Antonio-Black homes vs others	-.013	.163	1.367
BS1E2	Interaction of San Antonio-White homes vs others	-.052	.060	0.109
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.024	.061	0.176
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.257	.291	5.932*
BS2E1	Interaction of Philadelphia-Black homes vs others	-.032	-.175	1.244
BST1E1	Interaction of Regulated-Black homes vs others	-.010	-.128	0.414
BST1E2	Interaction of Regulated-White homes vs others	-.060	-.142	0.413
BST2E1	Interaction of Unregulated-Black homes vs others	-.045	-.297	4.627*
BST2E2	Interaction of Unregulated-White homes vs others	.139	-.108	0.308

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.213$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES LANGUAGE/INFORMATION - TOTAL"

(n = 210)

Dependent Variable: **SABC26**

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.083	-.160	0.985
BINSITE1	Binary on San Antonio vs others	-.045	.272	1.907
BINSITE2	Binary on Philadelphia vs others	-.082	-.304	2.967
BINSTAT1	Binary on Regulated vs others	.027	-.190	0.479
BINSTAT2	Binary on Unregulated vs others	.050	.073	0.144
BINETH1	Binary on Black homes vs others	-.032	.410	2.387
BINETH2	Binary on White homes vs others	.102	.251	1.005
NCT012C	Number of children less than 12 months	-.023	-.055	0.485
NC1235C	Number of children 12-35 months	.081	.035	0.150
NC3659C	Number of children 36-59 months	-.094	-.143	2.970
NC59PLC	**Number of children 60+ months**	-.096	-.023	0.043
MACGAGE	Caregiver age in years	-.125	-.192	3.285
MACGEXP	Caregiver experience in years	-.024	.089	1.012
MACGEDUC	Caregiver education in years	.138	.032	0.124
CGCHILD	**Caregiver's child is present**	.095	-.008	0.007
CGREL	**Caregiver's relative is present**	.089	.174	5.211*
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.062	-.086	0.682
AVGAGEC	**Average age of children (in months) excluding infants**	-.110	.021	0.027
RATEFEMC	Ratio of female children in home	.030	.056	0.556
RBLACK	Ratio of Black children in home	-.044	-.105	0.204
RWHITE	Ratio of White children in home	.075	-.134	0.538
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.013	.087	0.150
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.056	-.178	0.888
BS1E1	Interaction of San Antonio-Black homes vs others	-.070	-.200	2.020
BS1E2	Interaction of San Antonio-White homes vs others	-.004	-.239	1.728
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.044	.236	2.628
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.013	.082	0.463
BS2E1	Interaction of Philadelphia-Black homes vs others	-.079	-.116	0.542
BST1E1	Interaction of Regulated-Black homes vs others	.083	.069	0.118
BST1E2	Interaction of Regulated-White homes vs others	-.030	.055	0.062
BST2E1	Interaction of Unregulated-Black homes vs others	-.162	-.229	2.719
BST2E2	Interaction of Unregulated-White homes vs others	.190	.110	0.316

***These F ratios are significant at $p < .05$.**

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.202$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES STRUCTURED FINE MOTOR - TOTAL"

(n = 210)

Dependent Variable: SABC29

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.083	-.052	0.137
BINSITE1	Binary on San Antonio vs others	.246	.546	10.224*
BINSITE2	Binary on Philadelphia vs others	.256	.420	7.542*
BINSTAT1	Binary on Regulated vs others	.023	-.324	1.842
BINSTAT2	Binary on Unregulated vs others	-.087	-.348	4.412*
BINETH1	Binary on Black homes vs others	.140	-.002	0.000
BINETH2	Binary on White homes vs others	-.152	-.043	0.039
NCT012C	Number of children less than 12 months	.084	.027	0.156
NC1235C	Number of children 12-35 months	-.049	-.139	3.203
NC3659C	Number of children 36-59 months	-.045	-.050	0.479
NC59PLC	Number of children 60+ months	-.103	.073	0.599
MACGAGE	Caregiver age in years	.071	.085	0.858
MACGEXP	Caregiver experience in years	.010	-.028	0.137
MACGEDUC	Caregiver education in years	-.194	-.134	2.884
CGCHILD	Caregiver's child is present	-.035	.109	1.801
CGREL	Caregiver's relative is present	-.006	.001	0.000
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.156	-.073	0.646
AVGAGEC	Average age of children (in months) excluding infants	-.131	-.178	2.466
RATEFEMC	Ratio of female children in home	.075	.047	0.523
RBLACK	Ratio of Black children in home	.108	-.229	1.293
RWHITE	Ratio of White children in home	-.132	-.154	0.944
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.060	.073	0.141
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.124	.203	1.524
BS1E1	Interaction of San Antonio-Black homes vs others	.192	.060	0.241
BS1E2	Interaction of San Antonio-White homes vs others	-.000	-.310	3.886
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.152	-.022	0.031
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	.048	.038	0.136
BS2E1	Interaction of Philadelphia-Black homes vs others	.252	.195	2.024
BST1E1	Interaction of Regulated-Black homes vs others	.044	.207	1.414
BST1E2	Interaction of Regulated-White homes vs others	-.010	.353	3.359
BST2E1	Interaction of Unregulated-Black homes vs others	.051	.016	0.019
BST2E2	Interaction of Unregulated-White homes vs others	-.132	.214	1.591

*These F ratios are significant at $\rho < .05$.

For $\rho = < .05$, $F_{(1/150)}$ = 3.9[illegible]. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.399

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES EXPLORATORY FINE MOTOR WITH ANY CHILDREN"

(n = 210)

Dependent Variable: SABC31

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.016	.167	1.078
BINSITE1	Binary on San Antonio vs others	.056	.130	0.432
BINSITE2	Binary on Philadelphia vs others	.095	.278	2.480
BINSTAT1	Binary on Regulated vs others	.155	.013	0.002
BINSTAT2	Binary on Unregulated vs others	-.159	.025	0.017
BINETH1	Binary on Black homes vs others	.008	.768	8.332*
BINETH2	Binary on White homes vs others	.042	.264	1.107
NCT012C	Number of children less than 12 months	-.028	-.077	0.930
NC1235C	Number of children 12-35 months	.069	.006	0.004
NC3659C	Number of children 36-59 months	.001	-.070	0.706
NC59PLC	**Number of children 60+ months**	-.090	-.088	0.647
MACGAGE	Caregiver age in years	-.004	-.126	1.408
MACGEXP	Caregiver experience in years	.120	.123	1.907
MACGEDUC	Caregiver education in years	.013	-.033	0.131
CGCHILD	**Caregiver's child is present**	-.043	-.005	0.003
CGREL	**Caregiver's relative is present**	.012	.028	0.136
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	-.042	-.006	0.003
AVGAGEC	**Average age of children (in months) excluding infants**	-.069	-.039	0.089
RATEFEMC	Ratio of female children in home	.007	-.021	0.073
RBLACK	Ratio of Black children in home	-.032	-.243	1.091
RWHITE	Ratio of White children in home	.059	.111	0.367
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.190	.220	0.955
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.114	-.020	0.011
BS1E1	Interaction of San Antonio-Black homes vs others	-.072	-.354	6.309*
BS1E2	Interaction of San Antonio-White homes vs others	.055	-.059	0.104
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.027	.045	0.096
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.001	-.050	0.172
BS2E1	Interaction of Philadelphia-Black homes vs others	.003	-.350	4.877*
BST1E1	Interaction of Regulated-Black homes vs others	-.038	-.116	0.329
BST1E2	Interaction of Regulated-White homes vs others	.171	-.089	0.160
BST2E1	Interaction of Unregulated-Black homes vs others	.026	.098	0.498
BST2E2	Interaction of Unregulated-White homes vs others	-.193	-.235	1.436

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.198$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES GROSS MOTOR ACTIVITY WITH ANY CHILDREN"
(n = 210)

Dependent Variable: SABC36

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.070	-.149	0.800
BINSITE1	Binary on San Antonio vs others	-.032	.019	0.008
BINSITE2	Binary on Philadelphia vs others	.068	.059	0.103
BINSTAT1	Binary on Regulated vs others	-.027	.157	0.302
BINSTAT2	Binary on Unregulated vs others	-.015	-.017	0.007
BINETH1	Binary on Black homes vs others	.109	.270	0.960
BINETH2	Binary on White homes vs others	-.045	-.107	0.169
NCT012C	Number of children less than 12 months	-.033	-.006	0.006
NC1235C	Number of children 12-35 months	.045	.046	0.244
NC3659C	Number of children 36-59 months	-.040	-.041	0.226
NC59PLC	**Number of children 60+ months**	-.005	.003	0.001
MACGAGE	Caregiver age in years	-.022	-.052	0.227
MACGEXP	Caregiver experience in years	-.072	-.115	1.553
MACGEDUC	Caregiver education in years	.027	.070	0.555
CGCHILD	**Caregiver's child is present**	-.078	-.164	2.859
CGREL	**Caregiver's relative is present**	.166	.237	8.977*
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	.011	-.010	0.009
AVGAGEC	**Average age of children (in months) excluding infants**	.009	.062	0.209
RATEFEMC	Ratio of female children in home	-.058	-.029	0.132
RBLACK	Ratio of Black children in home	.074	-.343	2.037
RWHITE	Ratio of White children in home	-.051	-.083	0.193
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.042	-.056	0.057
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.041	.063	0.104
BS1E1	Interaction of San Antonio-Black homes vs others	-.023	-.056	0.145
BS1E2	Interaction of San Antonio-White homes vs others	.004	-.001	0.000
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.018	-.172	1.297
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.056	-.087	0.488
BS2E1	Interaction of Philadelphia-Black homes vs others	.157	.254	2.389
BST1E1	Interaction of Regulated-Black homes vs others	-.006	-.089	0.180
BST1E2	Interaction of Regulated-White homes vs others	-.032	.074	0.103
BST2E1	Interaction of Unregulated-Black homes vs others	-.020	-.100	0.483
BST2E2	Interaction of Unregulated-White homes vs others	.004	.124	0.373

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.141$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER FACILITATES PHYSICAL NEEDS - TOTAL"

(n = 210)

Dependent Variable: SABC40

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.001	-.225	1.902
BINSITE1	Binary on San Antonio vs others	.043	.458	5.248*
BINSITE2	Binary on Philadelphia vs others	-.033	.133	0.549
BINSTAT1	Binary on Regulated vs others	.105	.289	1.072
BINSTAT2	Binary on Unregulated vs others	-.066	.179	0.853
BINETH1	Binary on Black homes vs others	.003	-.310	1.321
BINETH2	Binary on White homes vs others	-.076	-.206	0.654
NCT012C	Number of children less than 12 months	-.139	-.170	4.423*
NC1235C	Number of children 12-35 months	.132	.060	0.433
NC3659C	Number of children 36-59 months	.092	.068	0.642
NC59PLC	Number of children 60+ months	-.058	-.077	0.491
MACCAGE	Caregiver age in years	-.128	-.083	0.587
MACCEXP	Caregiver experience in years	-.097	-.070	0.604
MACCEDUC	Caregiver education in years	.128	.164	3.166
CGCHILD	Caregiver's child is present	.108	.033	0.123
CGREL	Caregiver's relative is present	.017	.101	1.691
STDAGEC	Standard deviation of child ages (in months) excluding infants	.025	.058	0.296
AVGAGEC	Average age of children (in months) excluding infants	-.061	.010	0.005
RATEFEMC	Ratio of female children in home	.053	.049	0.412
RBLACK	Ratio of Black children in home	.025	.088	0.138
RWHITE	Ratio of White children in home	-.043	-.109	0.345
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.083	-.219	0.923
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.076	-.378	3.860
BS1E1	Interaction of San Antonio-Black homes vs others	-.068	-.144	1.012
BS1E2	Interaction of San Antonio-White homes vs others	-.048	.000	0.000
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.018	-.129	0.755
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.071	-.185	2.292
BS2E1	Interaction of Philadelphia-Black homes vs others	.001	.006	0.002
BST1E1	Interaction of Regulated-Black homes vs others	.041	.008	0.001
BST1E2	Interaction of Regulated-White homes vs others	-.025	-.117	0.267
BST2E1	Interaction of Unregulated-Black homes vs others	-.058	.045	0.100
BST2E2	Interaction of Unregulated-White homes vs others	-.027	-.002	0.000

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.177$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER EXPRESSES POSITIVE AFFECT"

(n = 210)

Dependent Variable: SABC43

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.055	-.056	0.116
BINSITE1	Binary on San Antonio vs others	-.039	.075	0.139
BINSITE2	Binary on Philadelphia vs others	.006	.089	0.244
BINSTAT1	Binary on Regulated vs others	.093	-.246	0.767
BINSTAT2	Binary on Unregulated vs others	-.041	.115	0.344
BINETH1	Binary on Black homes vs others	.089	.365	1.812
BINETH2	Binary on White homes vs others	-.119	.189	0.545
NCT012C	Number of children less than 12 months	.108	.111	1.861
NC1235C	Number of children 12-35 months	-.011	-.073	0.644
NC3659C	Number of children 36-59 months	-.149	-.122	2.050
NC59PLC	Number of children 60+ months	.081	.174	2.435
MACGAGE	Caregiver age in years	.077	-.015	0.020
MACGEXP	Caregiver experience in years	.014	-.052	0.326
MACGEDUC	Caregiver education in years	-.167	-.112	1.452
CGCHILD	Caregiver's child is present	-.092	-.106	1.219
CGREL	Caregiver's relative is present	-.001	-.019	0.061
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.013	-.105	0.954
AVGAGEC	Average age of children (in months) excluding infants	-.018	-.040	0.091
RATEFEMC	Ratio of female children in home	.048	.047	0.373
RBLACK	Ratio of Black children in home	.110	-.054	0.051
RWHITE	Ratio of White children in home	-.151	-.264	2.003
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.027	290	1.592
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.031	.117	0.365
BS1E1	Interaction of San Antonio-Black homes vs others	-.067	-.299	4.312*
BS1E2	Interaction of San Antonio-White homes vs others	-.054	-.251	1.835
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	.058	.030	0.041
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.058	-.038	0.097
BS2E1	Interaction of Philadelphia-Black homes vs others	.051	-.261	2.600
BST1E1	Interaction of Regulated-Black homes vs others	.197	.239	1.347
BST1E2	Interaction of Regulated-White homes vs others	-.051	.210	0.850
BST2E1	Interaction of Unregulated-Black homes vs others	-.097	-.152	1.139
BST2E2	Interaction of Unregulated-White homes vs others	-.062	.025	0.016

---

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.165$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER EXPRESSES NEGATIVE AFFECT"

(n = 210)

Dependent Variable: SABC44

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.000	.279	2.797
BINSITE1	Binary on San Antonio vs others	-.081	-.317	2.411
BINSITE2	Binary on Philadelphia vs others	-.035	-.017	0.009
BINSTAT1	Binary on Regulated vs others	.008	-.110	0.149
BINSTAT2	Binary on Unregulated vs others	-.077	-.298	2.252
BINETH1	Binary on Black homes vs others	.151	.155	0.317
BINETH2	Binary on White homes vs others	-.123	.046	0.031
NCT012C	Number of children less than 12 months	.008	.048	0.346
NC1235C	Number of children 12-35 months	.103	.119	1.644
NC3659C	Number of children 36-59 months	-.081	-.069	0.644
NC59PLC	**Number of children 60+ months**	.005	-.116	1.061
MACGAGE	Caregiver age in years	.070	.082	0.560
MACGEXP	Caregiver experience in years	-.054	-.097	1.118
MACGEDUC	Caregiver education in years	-.027	-.002	0.001
CGCHILD	**Caregiver's child is present**	-.061	-.031	0.099
CGREL	**Caregiver's relative is present**	-.029	-.055	0.494
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	.043	.040	0.137
AVGAGEC	**Average age of children (in months) excluding infants**	-.001	.163	1.207
RATEFEMC	Ratio of female children in home	-.051	-.057	0.517
RBLACK	Ratio of Black children in home	.181	.399	2.749
RWHITE	Ratio of White children in home	-.161	-.029	0.024
BS1ST1	Interaction of San Antonio-Regulated homes vs others	-.038	.209	0.802
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.023	.259	1.736
BS1E1	Interaction of San Antonio-Black homes vs others	-.014	-.112	0.592
BS1E2	Interaction of San Antonio-White homes vs others	-.032	-.033	0.030
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.029	-.047	0.097
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.065	-.036	0.084
BS2E1	Interaction of Philadelphia-Black homes vs others	.042	-.199	1.472
BST1E1	Interaction of Regulated-Black homes vs others	.090	-.051	0.059
BST1E2	Interaction of Regulated-White homes vs others	-.069	.134	0.338
BST2E1	Interaction of Unregulated-Black homes vs others	-.009	.032	0.048
BST2E2	Interaction of Unregulated-White homes vs others	-.032	.304	2.233

For $p = < .05$, $F_{(1/150)} = 3.91$.

Total R^2 = 0.140

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER CONTROLS - TOTAL"

(n = 210)

Dependent Variable: SABC45

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	-.028	-.221	1.762
BINSITE1	Binary on San Antonio vs others	.021	.067	0.109
BINSITE2	Binary on Philadelphia vs others	-.120	-.174	0.906
BINSTAT1	Binary on Regulated vs others	.011	-.006	0.000
BINSTAT2	Binary on Unregulated vs others	-.086	-.223	1.273
BINETH1	Binary on Black homes vs others	-.003	-.202	0.542
BINETH2	Binary on White homes vs others	-.033	.105	0.165
NCT012C	Number of children less than 12 months	.049	.066	0.632
NC1235C	Number of children 12-35 months	.198	.208	5.028*
NC3659C	Number of children 36-59 months	.029	.059	0.474
NC59PLC	Number of children 60+ months	.005	.054	0.231
MACGAGE	Caregiver age in years	-.066	.021	0.036
MACGEXP	Caregiver experience in years	-.079	-.090	0.970
MACGEDUC	Caregiver education in years	.053	.023	0.058
CGCHILD	Caregiver's child is present	.072	.083	0.733
CGREL	Caregiver's relative is present	-.048	-.041	0.266
STDAGEC	Standard deviation of child ages (in months) excluding infants	-.020	-.058	0.288
AVGAGEC	Average age of children (in months) excluding infants	-.074	-.002	0.000
RATEFEMC	Ratio of female children in home	-.076	-.023	0.087
RBLACK	Ratio of Black children in home	.027	-.035	0.021
RWHITE	Ratio of White children in home	-.078	-.389	4.249*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.004	-.125	0.288
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.006	.070	0.129
BS1E1	Interaction of San Antonio-Black homes vs others	-.020	-.058	0.161
BS1E2	Interaction of San Antonio-White homes vs others	.024	-.067	0.128
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.161	-.091	0.367
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.099	-.025	0.040
BS2E1	Interaction of Philadelphia-Black homes vs others	-.034	.066	0.164
BST1E1	Interaction of Regulated-Black homes vs others	-.039	-.044	0.045
BST1E2	Interaction of Regulated-White homes vs others	.025	.064	0.078
BST2E1	Interaction of Unregulated-Black homes vs others	.005	.120	0.694
BST2E2	Interaction of Unregulated-White homes vs others	-.047	.062	0.093

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total R^2 = 0.145

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER CONTROLS ANTISOCIAL SITUATION"

(n = 210)

Dependent Variable: SA[illegible]C47

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.019	-.293	3.133
BINSITE1	Binary on San Antonio vs others	-.051	.241	1.413
BINSITE2	Binary on Philadelphia vs others	-.047	-.029	0.025
BINSTAT1	Binary on Regulated vs others	.087	.323	1.294
BINSTAT2	Binary on Unregulated vs others	-.079	.198	1.010
BINETH1	Binary on Black homes vs others	-.059	-.268	0.959
BINETH2	Binary on White homes vs others	-.008	.224	0.748
NC.012C	Number of children less than 12 months	-.045	-.076	0.857
NC1235C	Number of children 12-35 months	.012	.020	0.047
NC3659C	Number of children 36-59 months	.115	.042	0.244
NC59PLC	Number of children 60+ months	.110	.044	0.151
MACGAGE	Caregiver age in years	-.150	-.091	0.697
MACGEXP	Caregiver experience in years	-.039	-.002	0.000
MACGEDUC	Caregiver education in years	-.010	-.055	0.343
CGCHILD	Caregiver's child is present	.170	.150	2.400
CGREL	Caregiver's relative is present	-.062	-.024	0.093
STDAGEC	Standard deviation of child ages (in months) excluding infants	.084	-.017	0.025
AVGAGEC	Average age of children (in months) excluding infants	.092	.092	0.462
RATEFEMC	Ratio of female children in home	-.068	-.021	0.074
RBLACK	Ratio of Black children in home	-.032	-.021	0.008
RWHITE	Ratio of White children in home	-.057	-.454	5.835*
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.067	-.228	0.973
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	-.151	-.335	2.942
BS1E1	Interaction of San Antonio-Black homes vs others	-.087	.030	0.042
BS1E2	Interaction of San Antonio-White homes vs others	-.055	-.031	0.028
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.055	-.165	1.205
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.013	-.034	0.077
BS2E1	Interaction of Philadelphia-Black homes vs others	-.043	.067	0.168
BST1E1	Interaction of Regulated-Black homes vs others	.019	-.050	0.058
BST1E2	Interaction of Regulated-White homes vs others	.031	-.135	0.347
BST2E1	Interaction of Unregulated-Black homes vs others	-.110	-.108	0.565
BST2E2	Interaction of Unregulated-White homes vs others	-.029	-.167	0.684

*These F ratios are significant at $p < .05$.

For $p = < .05$, $F_{(1/150)} = 3.91$. (The denominator used to derive the F value is the closest entry listed in the F table.)

Total $R^2 = 0.152$

Residual Degrees of Freedom = 177

SUMMARY TABLE FOR THE REGRESSION ANALYSIS OF THE STRUCTURED SITUATION; DEPENDENT VARIABLE, "CAREGIVER STRICTLY CONTROLS ANY CHILDREN"

(n = 210)

Dependent Variable: SABC48

	Independent Variables	r	Beta	F
RATEHISC	Ratio of Hispanic children in home	.081	.104	0.369
BINSITE1	Binary on San Antonio vs others	.135	.131	0.395
BINSITE2	Binary on Philadelphia vs others	-.084	.187	0.994
BINSTAT1	Binary on Regulated vs others	-.027	.304	1.081
BINSTAT2	Binary on Unregulated vs others	.082	.178	0.765
BINETH1	Binary on Black homes vs others	-.051	-.101	0.127
BINETH2	Binary on White homes vs others	-.011	.108	0.164
NCT012C	Number of children less than 12 months	.056	.099	1.358
NC1235C	Number of children 12-35 months	.048	.004	0.002
NC3659C	Number of children 36-59 months	-.004	.051	0.328
NC59PLC	**Number of children 60+ months**	-.015	-.040	0.118
MACGAGE	Caregiver age in years	-.064	-.083	0.539
MACGEXP	Caregiver experience in years	-.027	-.021	0.048
MACGEDUC	Caregiver education in years	.002	.064	0.433
CGCHILD	**Caregiver's child is present**	-.013	-.110	1.210
CGREL	**Caregiver's relative is present**	-.040	-.053	0.434
STDAGEC	**Standard deviation of child ages (in months) excluding infants**	.064	.157	2.001
AVGAGEC	**Average age of children (in months) excluding infants**	-.017	-.113	0.663
RATEFEMC	Ratio of female children in home	-.049	-.055	0.465
RBLACK	Ratio of Black children in home	-.048	.119	0.232
RWHITE	Ratio of White children in home	-.040	-.187	0.934
BS1ST1	Interaction of San Antonio-Regulated homes vs others	.069	-.126	0.278
BS1ST2	Interaction of San Antonio-Unregulated homes vs others	.088	-.105	0.273
BS1E1	Interaction of San Antonio-Black homes vs others	.020	.004	0.001
BS1E2	Interaction of San Antonio-White homes vs others	.076	.062	0.103
BS2ST1	Interaction of Philadelphia-Regulated homes vs others	-.073	-.129	0.698
BS2ST2	Interaction of Philadelphia-Unregulated homes vs others	-.057	-.218	2.903
BS2E1	Interaction of Philadelphia-Black homes vs others	-.030	-.026	0.024
BST1E1	Interaction of Regulated-Black homes vs others	-.086	-.228	1.140
BST1E2	Interaction of Regulated-White homes vs others	-.038	-.192	0.656
BST2E1	Interaction of Unregulated-Black homes vs others	.025	.061	0.168
BST2E2	Interaction of Unregulated-White homes vs others	.076	.093	0.198

Total R^2 = 0.098

Residual Degrees of Freedom = 177

Appendix E

SIGNIFICANT INTERACTIONS OF DESIGN VARIABLES (STATUS, SITE, AND ETHNICITY) USING CAREGIVER AND CHILD BEHAVIOR VARIABLES

SIGNIFICANT INTERACTIONS OF SITE WITH STATUS AND SITE WITH ETHNICITY USING CAREGIVER AND CHILD BEHAVIOR VARIABLES

SITE

Adult Behaviors

ABC03	Caregiver Teaches - Total (Inter: SA-Reg SA-Unreg)
ABC04	Plays/Participates with Child 1 (Inter: Unreg-Black)
ABC10	Caregiver Directs Child 1 (Inter: SA-Reg SA-Unreg SA-White)
ABC11	Directs Child 2 (Inter: Reg-White Unreg-White)
ABC13	Caregiver Converses with Child 1, Not Negative (Inter: SA-Unreg SA-Black)
ABC14	Converses with Child 2, Not Negative (Inter: Reg-Black Reg-White)
ABC15	Converses - Total (Inter: SA-Unreg)
ABC16	Caregiver Supervises and Prepares for Children (Inter: Unreg-White)
ABC17	Caregiver Converses with Another Adult (Inter: Phil-Black)

ABC19	Caregiver Involved in Recreational Activity (Inter: Phil-Black)
ABC20	Not Involved (Out of Range or Room) (Inter: Unreg-White)
ABC24	Facilitates Language/Information with Child 1 (Inter: SA-Black)
ABC26	Facilitates Language/Information - Total (Inter: SA-Reg SA-Unreg SA-Black)
ABC27	Facilitates Structured Fine Motor with Child 1 (Inter: Phil-Unreg Unreg-Black)
ABC30	Caregiver Facilitates Dramatic Play - Total (Inter: Phil-Black)
ABC31	Facilitates Exploratory Fine Motor with any Children (Inter: Phil-Unreg Unreg-Black Unreg-White)
ABC33	Facilitates Work with Child 2 (Inter: Phil-Unreg Phil-Black)
ABC34	Facilitates Work - Total (Inter: SA-Reg SA-Unreg)
ABC36	Facilitates Gross Motor Activities with any Children (Inter: Reg-Black)
ABC39	Caregiver Facilitates Physical Needs with Child 2 (Inter: SA-Unreg)

STATUS--REGULATED HOMES

Adult Behavior Codes

ABC03	Caregiver Teaches - Total (Inter: SA-Reg SA-Unreg)
ABC04	Caregiver Plays/Participates with Child 1 (Inter: Unreg-Black)
ABC10	Caregiver Directs Child 1 (Inter: SA-Reg SA-Unreg SA-White)
ABC11	Caregiver Directs Child 2 (Inter: Reg-White Unreg-White)
ABC13	Caregiver Converses with Child 1, not Negative (Inter: SA-Unreg SA-Black)
ABC14	Caregiver Converses with Child 2, not Negative (Inter: Reg-Black Reg-White)
ABC15	Caregiver Converses - Total (Inter: SA-Unreg)
ABC16	Caregiver Supervises and Prepares for Children (Inter: Unreg-White)
ABC17	Caregiver Converses with Another Adult (Inter: Phil-Black)
ABC19	Caregiver Involved in Recreational Activity (Inter: Phil-Black)
ABC20	Caregiver not Involved (Out of Range or Room) (Inter: Unreg-White)
ABC24	Caregiver Facilitates Language/Information with Child 1 (Inter: SA-Black)

ABC26	Caregiver Facilitates Language/Information Total (Inter: SA-Reg SA-Unreg SA-Black)
ABC27	Caregiver Facilitates Structured Fine Motor with Child 1 (Inter: Phil-Unreg Unreg-Black)
ABC30	Caregiver Facilitates Dramatic Play Total (Inter: Phil-Black)
ABC31	Caregiver Facilitates Exploratory Fine Motor with Any Children (Inter: Phil-Unreg Unreg-Black Unreg-White)
ABC33	Caregiver Facilitates Work with Child 2 (Inter: Phil-Unreg Phil-Black)
ABC34	Caregiver Facilitates Work - Total (Inter: SA-Reg SA-Unreg)
ABC36	Caregiver Facilitates Gross Motor Activities with Any Children (Inter: Reg-Black)
ABC39	Caregiver Facilitates Physical Needs with Child 2 (Inter: SA-Unreg)

STATUS--UNREGULATED HOMES

Adult Behavior Codes

ABC03	Caregiver Teaches - Total (Inter: SA-Reg SA-Unreg)
ABC04	Caregiver Plays/Participates with Child 1 (Inter: Unreg-Black)
ABC10	Caregiver Directs Child 1 (Inter: SA-Reg SA-Unreg SA-White)

ABC11	Caregiver Directs Child 2 (Inter: Reg-White Unreg-White)
ABC13	Caregiver Converses with Child 1, not Negative (Inter: SA-Unreg SA-Black)
ABC14	Caregiver Converses with Child 2, not Negative (Inter: Reg-Black Reg-White)
ABC15	Caregiver Converses - Total (Inter: SA-Unreg)
ABC16	Caregiver Supervises and Prepares for Children (Inter: Unreg-White)
ABC17	Caregiver Converses with Another Adult (Inter: Phil-Black)
ABC19	Caregiver Involved in Recreational Activity (Inter: Phil-Black)
ABC20	Caregiver not Involved (Out of Range or Room) (Inter: Unreg-White)
ABC24	Caregiver Facilitates Language/Information with Child 1 (Inter: SA-Black)
ABC26	Caregiver Facilitates Language/Information Total (Inter: SA-Reg SA-Unreg SA-Black)
ABC27	Caregiver Facilitates Structured Fine Motor with Child 1 (Inter: Phil-Unreg Unreg-Black)
ABC30	Caregiver Facilitates Dramatic Play Total (Inter: Phil-Black)

ABC31	Caregiver Facilitates Exploratory Fine Motor with Any Children (Inter: Phil-Unreg Unreg-Black Unreg-White)
ABC33	Caregiver Facilitates Work with Child 2 (Inter: Phil-Unreg Phil-Black)
ABC34	Caregiver Facilitates Work - Total (Inter: SA-Reg SA-Unreg)
ABC36	Caregiver Facilitates Gross Motor Activities with Any Children (Inter: Reg-Black)
ABC39	Caregiver Facilitates Physical Needs with Child 2 (Inter: SA-Unreg)

SITE

Child 1

C1V04	Seeks Attention of Caregiver (Inter: Reg-White)
C1V06	Engages in Looking at a Book (Inter: SA-Reg)
C1V07	Language/Information with Caregiver (Inter: Phil-Reg)
C1V08	Structured Fine Motor (Inter: Phil-Reg Phil-Black Unreg-White)
C1V09	Exploratory Fine Motor Alone (Inter: Phil-Unreg Phil-Black)
C1V12	Work (Inter: SA-Reg SA-Unreg SA-Black Phil-Unreg Reg-Black)

C1V13	Engages in Music/Dance (Inter: Reg-White)
C1V15	Watches TV Alone (Inter: Phil-Reg)
C1V16	Watches Educational TV with Someone (Inter: SA-White Reg-Black)
C1V21	Conversation with Caregiver (Inter: Phil-Reg Phil-Unreg Reg-Black Unreg-Black)
C1V22	Antisocial to Young Child (Inter: Phil-Reg)
C1V24	Controlled by Caregiver (Inter: Reg-Black Reg-White)
C1V25	Monitoring - Total (Inter: SA-White Reg-White)
C1V26	Alone - Total (Inter: Phil-Reg)
C1V27	With Other Young Child - Total (Inter: Phil-Reg)
C1V28	With Caregiver - Total (Inter: Phil-Reg)

STATUS--REGULATED HOMES

Child 1

C1V04	Child 1 Seeks Attention of Caregiver (Inter: Reg-White)
C1V06	Child 1 Engages in Looking at a Book (Inter: SA-Reg)
C1V07	Child 1 Engages in Language/ Information with Caregiver (Inter: Phil-Reg)

C1V08	Child 1 Engages in Structured Fine Motor (Inter: Phil-Reg Phil-Black Unreg-White)
C1V09	Child 1 Engages in Exploratory Fine Motor Alone (Inter: Phil-Unreg Phil-Black)
C1V12	Child Engages in Work (Inter: SA-Reg SA-Unreg SA-Black Phil-Unreg Reg-Black)
C1V13	Child 1 Engages in Music/Dance (Inter: Reg-White)
C1V15	Child 1 Watches any TV Alone (Inter: Phil-Reg)
C1V16	Child 1 Watches Educational TV with Someone (Inter: SA-White) Reg-Black)
C1V21	Child 1 Engages in Conversation with Caregiver (Inter: Phil-Reg Phil-Unreg Reg-Black Unreg-Black
C1V22	Child 1 Antisocial to Young Child (Inter: Phil-Reg)
C1V24	Child 1 Controlled by Caregiver (Inter: Reg-Black Reg-White)
C1V25	Child 1 Monitoring - Total (Inter: SA-White Reg-White)
C1V26	Child 1 Alone - Total (Inter: Phil-Reg)
C1V27	Child 1 with Other Young Child Total (Inter: Phil-Reg)

C1V28	Child 1 with Caregiver - Total (Inter: Phil-Reg)

STATUS--UNREGULATED HOMES

Child 1

C1V04	Child 1 Seeks Attention of Caregiver (Inter: Reg-White)
C1V06	Child 1 Engages in Looking at a Book (Inter: SA-Reg)
C1V07	Child 1 Engages in Language/Information with Caregiver (Inter: Phil-Reg)
C1V08	Child 1 Engages in Structured Fine Motor (Inter: Phil-Reg Phil-Black Unreg-White)
C1V09	Child 1 Engages in Exploratory Fine Motor Alone (Inter: Phil-Unreg Phil-Black)
C1V12	Child 1 Engages in Work (Inter: SA-Unreg SA-Reg SA-Black Phil-Unreg Reg-Black)
C1V13	Child 1 Engages in Music/Dance (Inter: Reg-White)
C1V15	Child 1 Watches Any TV - Alone (Inter: Phil-Reg)
C1V16	Child 1 Watches Educational TV with Someone (Inter: SA-White Reg-Black)
C1V21	Child 1 Engages in Conversation with Caregiver (Inter: Phil-Reg Phil-Unreg Reg-Black Unreg-Black)

C1V22	Child 1 Antisocial to Young Child (Inter: Phil-Reg)
C1V24	Child 1 Controlled by Caregiver (Inter: Reg-Black Reg-White)
C1V25	Child 1 Monitoring - Total (Inter: SA-White Reg-White)
C1V26	Child 1 Alone - Total (Inter: Phil-Reg)
C1V27	Child 1 with Other Young Child - Total (Inter: Phil-Reg)
C1V28	Child 1 with Caregiver - Total (Inter: Phil-Reg)

SITE

Child 2

C2V01	Engages in Prosocial Activity (Inter: Phil-Unreg)
C2V02	Engages in Affectionate Behavior (Inter: Unreg-Black)
C2V07	Engages in Langauge/Information with Caregiver (Inter: Unreg-White)
C2V09	Exploratory Fine Motor - Alone (Inter: Phil-Unreg)
C2V11	Exploratory Fine Motor with Caregiver (Inter: Reg-White)
C2V12	Work (Inter: SA-Reg SA-Black)
C2V14	Engages in Gross Motor Activity (Inter: Phil-Black)
C2V16	Watches Educational TV with Someone (Inter: Reg-Black)

C2V24	Controlled by Caregiver (Inter: Phil-Unreg)
C2V25	Monitoring - Total (Inter: Phil-Reg Phil-Black Reg-Black Reg-White Unreg-White)

STATUS--REGULATED HOMES

Child 2

C2V01	Child 2 Engages in Prosocial Activity (Inter: Phil-Unreg)
C2V02	Child 2 Engages in Affectionate Behavior (Inter: Unreg-Black)
C2V07	Child 2 Engages in Language/Information with Caregiver (Inter: Unreg-White)
C2V09	Child 2 Engages in Exploratory Fine Motor - Alone (Inter: Phil-Unreg)
C2V11	Child 2 Engages in Exploratory Fine Motor with Caregiver (Inter: Reg-White)
C2V12	Child 2 Engages in Work (Inter: SA-Reg SA-Black)
C2V14	Child 2 Engages in Gross Motor Activities (Inter: Phil-Black)
C2V16	Child 2 Watches Educational TV with Someone (Inter: Reg-Black)
C2V24	Child 2 Controlled by Caregiver (Inter: Phil-Unreg)
C2V25	Child 2 Monitoring - Total (Inter: Phil-Reg Phil-Black Reg-Black Reg-White Unreg-Black)

STATUS--UNREGULATED HOMES

Child 2

C2V01	Child 2 Engages in Prosocial Activity (Inter: Phil-Unreg)
C2V02	Child 2 Engages in Affectionate Behavior (Inter: Unreg-Black)
C2V07	Child 2 Engages in Language/Information with Caregiver (Inter: Unreg-White)
C2V09	Child 2 Engages in Exploratory Fine Motor Alone (Inter: Phil-Unreg)
C2V11	Child 2 Engages in Exploratory Fine Motor with Caregiver (Inter: Reg-White)
C2V12	Child 2 Engages in Work (Inter: SA-Reg SA-Black)
C2V14	Child 2 Engages in Gross Motor Activities (Inter: Phil-Black)
C2V16	Child 2 Watches Educational TV with Someone (Inter: Reg-Black)
C2V24	Child 2 Controlled by Caregiver (Inter: Phil-Unreg)
C2V25	Child 2 Monitoring - Total (Inter: Phil-Reg Phil-Black Reg-Black Reg-White Unreg-Black)

* U.S.G.P.O. 629-864/1302-6028